

ESTD. 1876. ONE TO YEARS.
CHURCH & DWIGHT CO.
 100 N. 3RD ST. NEW YORK CITY
 FACTORY BUILDING, 100 N. 3RD ST. NEW YORK CITY
 WHOLESALE AND RETAIL

COW BRAND
 TRADE MARK
 1876.
SODA
 BICARBONATE OF SODA

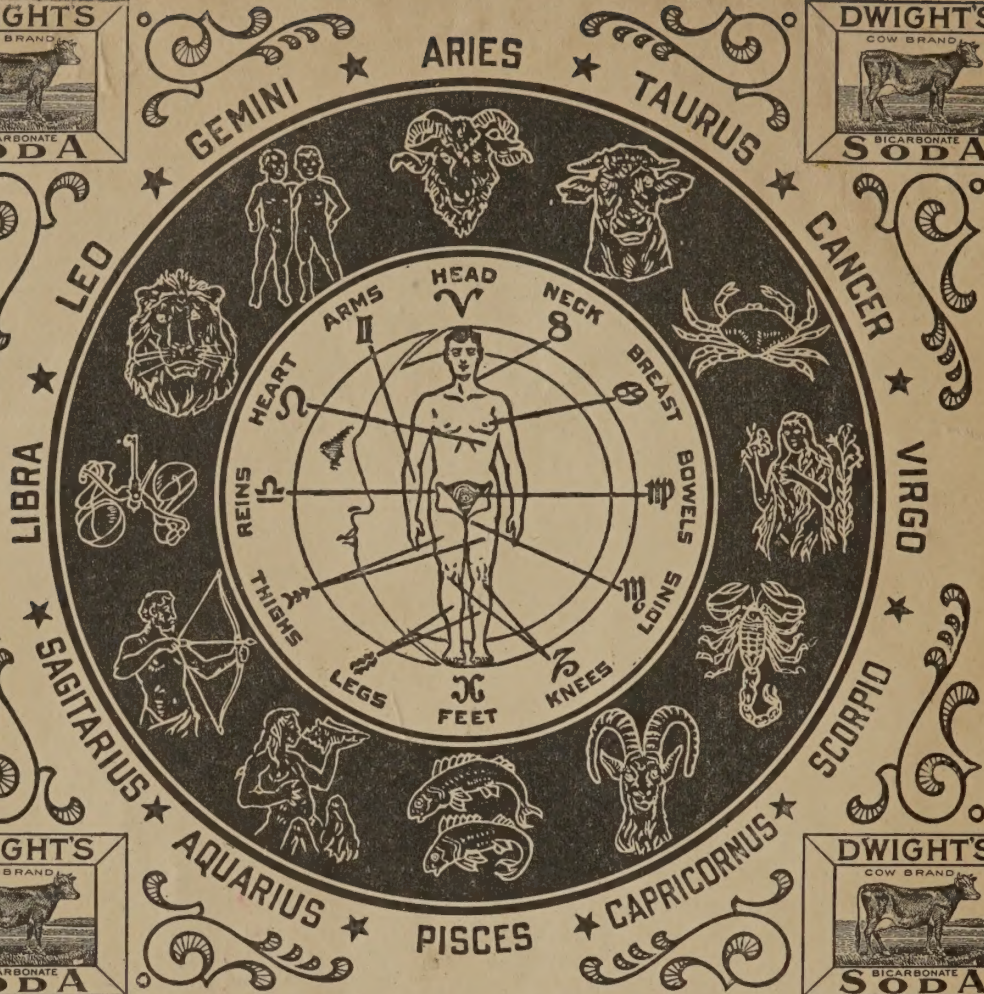
DON SWIFT & CO. SODA.

DON'T OPEN THIS END.

1917

PUBLISHED BY CHURCH & DWIGHT CO. NEW YORK.

COPYRIGHT 1917 BY CHURCH & DWIGHT CO., N.Y.



THE SEASONS OF 1917.

Spring begins Mar. 20th, 10 h. 38 m. E.

Autumn begins Sept. 23rd, 9 h. 1 m. M.

Summer begins June 21st, 6 h. 14 m. E.

Winter begins Dec. 22nd, 3 h. 46 m. M.

MORNING AND EVENING STARS, 1917.

The Planet Venus is Morning Star until April 26th, then Evening Star the rest of the year. The Planet Mars is Evening Star until February 28th, then Morning Star till the close of the year. The Planet Jupiter begins as Evening Star and continues as such until May 9th, after which date he is Morning Star to November 28th, then Evening Star until the close of the year. The Planet Saturn is Evening Star until July 27th, then Morning Star the balance of the year.

ECLIPSES OF THE SUN AND MOON FOR 1917.

There will be seven Eclipses, four of the Sun and three of the Moon. The first, Total Eclipse of the Moon Jan. 7th to 8th, visible to all parts of the U. S., Western Europe, Africa, South America and Pacific Ocean, occurring as follows: CENTRAL TIME—Moon enters shadow, Jan. 7th, 11 h. and 50 m. p.m. Total Eclipse begins, Jan. 8th, 1 h. 0 m. a.m. Middle of Eclipse, Jan. 8th, 1 h. 45 m. a.m. Total Eclipse ends, Jan. 8th, 2 h. 29 m. a.m. Moon leaves shadow, Jan. 8th, 3 h. 39 m. a.m. The second, Partial Eclipse of the Sun, Jan. 22nd, invisible in the U. S. The third, Partial Eclipse of the Sun, June 19th, invisible in the U. S. The fourth, Total Eclipse of the Moon, July 4th, invisible in the U. S., visible to Asia, Africa, Australia, Europe, South America, and South Atlantic Ocean. The fifth, Partial Eclipse of the Sun, July 18th, invisible in the U. S. The sixth, Annual Eclipse of the Sun, Dec. 14th, invisible in the U. S. The seventh, Total Eclipse of the Moon, Dec. 28th, visible in all parts of the U. S., South America, Northeastern Asia, Australia, and throughout the Pacific Ocean, occurring in the U. S. as follows: CENTRAL TIME.—Moon enters shadow, Dec. 28th, 2 h. 5 m. a.m. Total Eclipse begins, Dec. 28th, 3 h. 38 m. a.m. Middle of Eclipse, Dec. 28th, 3 h. 46 m. a.m. Total Eclipse ends, Dec. 28th, 3 h. 57 m. a.m. Moon leaves shadow, Dec. 28th, 5 h. 27 m. a.m. For Eastern Time add 1 h.; for Mountain Time deduct 1 h.; for Pacific Time deduct 2 h.

FESTIVALS, CHURCH DAYS, ETC., 1917.

Septuagesima Sunday . . . Feb. 4
Quinquagesima Sunday . . . Feb. 18
Shrove Tuesday . . . Feb. 20
Ash Wednesday . . . Feb. 21
Palm Sunday . . . April 1
Good Friday . . . April 6

First Day of Passover . . . April 7
Easter Sunday . . . April 8
Rogation Sunday . . . April 13
Ascension Day . . . May 17
Pentecost Sunday . . . May 27
Trinity Sunday . . . June 3

Corpus Christi . . . June 1
Hebrew New Year . . . Sept 17
Yom Kippur . . . Sept. 26
Thanksgiving Day . . . Nov. 29
Advent Sunday . . . Dec. 2
Christmas Day . . . Dec. 25



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

☉ Full Moon
☾ Last Quarter . . .
☾ New Moon
☽ First Quarter. . .

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.
8 2 53 Mor.
16 6 58 Mor.
23 2 56 Mor.
29 8 17 Eve.

D. H. M.
8 2 46 Mor.
16 6 46 Mor.
23 2 44 Mor.
29 8 5 Eve.

D. H. M.
8 2 22 Mor.
16 6 22 Mor.
23 2 20 Mor.
29 7 41 Eve.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Slow	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1 M.		New Year's day.	☾	3 40	7 30	4 39	1 5	7 24	4 43	1 2	7 3	5 5	0 53
2 T.		Battle of Princeton, 1777	☾	4 8	7 30	4 40	2 12	7 25	4 44	2 7	7 3	5 6	1 56
3 W.		Bishop Hughes died, 1864	☾	4 36	7 30	4 40	3 18	7 25	4 45	3 12	7 3	5 7	2 56
4 T.		First U. S. Congress opened, 1790	☾	5 4	7 30	4 41	4 21	7 25	4 46	4 14	7 3	5 7	3 55
5 F.		Steamer Oklahoma sank, 1914	☾	5 31	7 30	4 42	5 21	7 25	4 47	5 13	7 3	5 8	4 52
6 S.		Epiphany.	☾	5 57	7 30	4 43	6 15	7 25	4 48	6 7	7 4	5 9	5 44
7 S.		1st Sunday after Epiphany.	☾	6 23	7 30	4 44	Rises	7 25	4 49	Rises	7 4	5 10	Rises
8 M.		Gen. Jas. Longstreet born, 1823	☾	6 49	7 29	4 45	5 9	7 24	4 50	5 16	7 4	5 11	5 38
9 T.		Mississippi seceded, 1861	☾	7 14	7 29	4 46	6 10	7 24	4 51	6 16	7 4	5 11	6 33
10 W.		Steamer Potaro sank, 1915	☾	7 38	7 29	4 47	7 10	7 24	4 52	7 14	7 4	5 12	7 28
11 T.		Alabama seceded, 1861	☾	8 2	7 29	4 48	8 11	7 23	4 53	8 14	7 4	5 13	8 24
12 F.		Lincoln's 1st speech in Cong., 1848	☾	8 26	7 29	4 49	9 11	7 23	4 54	9 12	7 4	5 14	9 17
13 S.		Gold first at premium, 1862	☾	8 48	7 28	4 50	10 13	7 23	4 55	10 12	7 3	5 14	10 12
14 S.		2nd Sunday after Epiphany.	☾	9 11	7 28	4 51	11 14	7 23	4 56	11 12	7 3	5 15	11 9
15 M.		Fort Fisher captured, 1865	☾	9 32	7 27	4 52	M'ng	7 22	4 57	M'ng	7 3	5 16	M'ng
16 T.		Marshall Field died, 1906	☾	9 53	7 27	4 54	0 17	7 22	4 58	0 15	7 3	5 17	0 7
17 W.		Earthquake in Mexico, 1901	☾	10 13	7 26	4 55	1 25	7 21	4 59	1 21	7 3	5 17	1 9
18 T.		Scott discovers South Pole, 1912	☾	10 33	7 26	4 56	2 35	7 21	5 0	2 31	7 2	5 18	2 14
19 F.		Edgar Allen Poe born, 1812	☾	10 51	7 25	4 57	3 46	7 20	5 1	3 41	7 2	5 19	3 21
20 S.		John Ruskin died, 1900	☾	11 9	7 25	4 59	4 55	7 19	5 2	4 50	7 2	5 20	4 28
21 S.		3rd Sunday after Epiphany.	☾	11 27	7 24	5 0	5 57	7 18	5 4	5 52	7 1	5 21	5 31
22 M.		Queen Victoria died, 1901	☾	11 43	7 24	5 1	Sets	7 18	5 5	Sets	7 1	5 22	Sets
23 T.		Panama Canal commenced, 1880	☾	11 59	7 23	5 2	5 53	7 17	5 6	5 57	7 1	5 23	6 12
24 W.		Gold discovered in California, 1848	☾	12 14	7 22	5 4	7 10	7 16	5 7	7 14	7 0	5 24	7 24
25 T.		Conversion of St. Paul, 12 28	☾	12 28	7 22	5 5	8 27	7 15	5 9	8 29	7 0	5 25	8 33
26 F.		Michigan admitted as a State, 1837	☾	12 42	7 21	5 6	9 40	7 15	5 10	9 40	6 59	5 26	9 40
27 S.		German Emperor born, 1859	☾	12 54	7 20	5 7	10 52	7 14	5 11	10 50	6 59	5 27	10 44
28 S.		4th Sunday after Epiphany.	☾	13 6	7 19	5 9	11 59	7 13	5 12	11 57	6 58	5 28	11 47
29 M.		William McKinley born, 1843	☾	13 17	7 18	5 10	M'ng	7 13	5 13	M'ng	6 58	5 29	M'ng
30 T.		General N. P. Banks born, 1816	☾	13 27	7 17	5 11	1 6	7 12	5 15	1 2	6 57	5 30	6 48
31 W.		Vaccination disc. by Dr. Jenner, 1798	☾	13 36	7 16	5 13	2 10	7 11	5 16	2 6	6 57	5 31	7 48

WEATHER FORECAST FOR JANUARY, 1917

1st to 3rd, mild period. Generally fair in most Sections of the West and South; unsettled in the Lake region and Northeast. 4th to 7th, cold wave. Zero temperatures in the Rocky Mountains, Missouri Valley and Lake regions; freezing weather down near the Gulf Coast. 8th to 11th, storm period. General rains in the South and East; snow-blockades in the Northwest; dangerous gales on the Great Lakes and along North Atlantic Coast. 12th to 16th, cold, frosty period. Fair and clear in Western and Northwestern portions and over Lake region; damp and threatening in the Gulf and South Atlantic States. 17th to 19th, unsettled period. 20th to 23rd, Venus and Mars storm period. General snow-fall in the West, Central, Northern and Eastern Sections; rain and stormy in the South. 24th to 27th, cold wave. Cold, with freezing weather as far South as Texas, Louisiana and Florida; Zero temperature North of Oklahoma and Tennessee. Rivers blocked with ice in all Northern States. 28th to 31st, unsettled wave. Threatening conditions in the South and East, with cold, wintry weather in Middle and Northern States; damp, rainy weather on Pacific Coast. Mean temperature for January about normal. Precipitation deficient everywhere, except on Pacific and East Gulf Coasts, where it will be excessive.

DEMAND COW BRAND SODA IN PACKAGES



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

- ☾ Full Moon 6 10 40 Eve.
- ☾ Last Quarter 14 9 9 Eve.
- ☾ New Moon 21 1 25 Eve.
- ☾ First Quarter 28 11 59 Mor.

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

- D. H. M. 6 10 40 Eve.
- 14 9 9 Eve.
- 21 1 25 Eve.
- 28 11 59 Mor.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

- D. H. M. 6 10 28 Eve.
- 14 8 57 Eve.
- 21 1 13 Eve.
- 28 11 48 Mor.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

- D. H. M. 6 10 4 Eve.
- 14 8 33 Eve.
- 21 0 53 Eve.
- 28 11 24 Mor.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Slow	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	T.	King of Portugal assassinated, 1908	☾	13 45	7 15	5 14	3 12	7 10	5 18	3 7	6 55	5 33	2 40
2	F.	Ground Hog Day.	☾	13 52	7 14	5 15	4 8	7 9	5 19	4 3	6 54	5 34	3 41
3	S.	George Childs died, 1894	☾	13 59	7 13	5 16	4 57	7 7	5 20	4 52	6 53	5 35	4 30
4	S.	Septuagesima Sunday.	☾	14 5	7 12	5 18	5 40	7 6	5 22	5 35	6 53	5 36	5 15
5	M.	Missouri State Capitol burns, 1911	☾	14 10	7 11	5 19	6 16	7 5	5 23	6 12	6 52	5 37	5 54
6	T.	Fort Henry captured, 1862	☾	14 14	7 9	5 20	Rises	7 4	5 24	Rises	6 51	5 38	Rises
7	W.	Charles Dickens born, 1812	☾	14 18	7 8	5 22	6 4	7 3	5 25	6 7	6 50	5 39	6 18
8	T.	Russia-Japan War began, 1904	☾	14 20	7 7	5 23	7 4	7 2	5 26	7 5	6 50	5 40	7 11
9	F.	Wm. Harrison born, 1773	☾	14 22	7 6	5 24	8 7	7 1	5 28	8 5	6 49	5 41	8 8
10	S.	Parcel Post begins in Canada, 1914	☾	14 23	7 4	5 25	9 10	7 0	5 29	9 6	6 48	5 42	9 4
11	S.	Scragesima Sunday.	☾	14 24	7 3	5 27	10 10	6 59	5 30	10 7	6 47	5 43	10 1
12	M.	Lincoln's birthday.	☾	14 23	7 2	5 28	11 14	6 57	5 31	11 11	6 46	5 44	11 0
13	T.	Capt. Cook killed, 1779	☾	14 22	7 0	5 29	M'ng	6 56	5 33	M'ng	6 45	5 44	M'ng
14	W.	St. Valentine.	☾	14 20	6 58	5 31	0 20	6 54	5 34	0 16	6 44	5 45	0 0
15	T.	Gen. Lew Wallace died, 1905	☾	14 17	6 57	5 32	1 29	6 53	5 36	1 23	6 43	5 46	1 4
16	F.	Fall of Fort Donelson, 1862	☾	14 14	6 56	5 33	2 36	6 52	5 37	2 30	6 42	5 47	2 9
17	S.	Printing discovered, 1477	☾	14 10	6 55	5 35	3 40	6 51	5 38	3 33	6 41	5 48	3 12
18	S.	Quinquagesima Sunday.	☾	14 5	6 54	5 36	4 37	6 50	5 39	4 31	6 40	5 48	4 11
19	M.	Great strike at Philadelphia, 1910	☾	14 0	6 53	5 37	5 25	6 48	5 41	5 20	6 39	5 40	5 3
20	T.	Shrove Tuesday.	☾	13 54	6 52	5 38	6 4	6 46	5 42	6 0	6 37	5 50	5 49
21	W.	Ash Wednesday.	☾	13 47	6 50	5 40	Sets	6 44	5 44	Sets	6 36	5 51	Sets
22	T.	Washington's birthday, 1732	☾	13 40	6 49	5 41	7 15	6 43	5 45	7 14	6 35	5 52	7 17
23	F.	John Quincy Adams died, 1848	☾	13 32	6 48	5 42	8 30	6 42	5 46	8 28	6 34	5 52	8 25
24	S.	Arizona Territory formed, 1863	☾	13 23	6 46	5 43	9 44	6 40	5 47	9 40	6 33	5 53	9 32
25	S.	1st Sunday in Lent.	☾	13 14	6 44	5 44	10 52	6 39	5 48	10 48	6 32	5 54	10 36
26	M.	Gen. Patrick Walsh died, 1900	☾	13 4	6 43	5 45	11 59	6 38	5 49	11 54	6 31	5 54	11 37
27	T.	Henry W. Longfellow born, 1807	☾	12 54	6 41	5 46	M'ng	6 37	5 50	M'ng	6 30	5 55	M'ng
28	W.	Ember day.	☾	12 43	6 39	5 48	1 2	6 35	5 51	0 56	6 29	5 55	0 37

WEATHER FORECAST FOR FEBRUARY, 1917

1st to 3rd, severe storm period, under the power of Venus and Mars. Severe storms of rain, sleet and snow at many points East of the Rocky Mountains; general rains in the Gulf States. Severe storms probable along the Atlantic Coast. Ship owners take notice. 4th to 8th, cold wave. Cold weather over States of Rocky Mountains, the Northwest, Middle West States of the Ohio River Valley; freezing weather will reach as far South as Middle Florida. 9th and 10th, fair and moderating. 11th to 15th, Mercury-Venus-Mars storm period. Severe storms of rain, sleet and snow covering the country West of the Mississippi River. High winds over the Central Valleys, Lake regions and Middle Atlantic States, attended with damaging sleet storms in some localities. 16th to 18th, cold wave. Heavy snow squalls in the Lake regions, Ohio Valley and along the Atlantic Coast. 19th to 22nd, continued cold wave. Mercury below zero in the Northern Rocky Mountains, Lake region, Ohio Valley and New England States. Killing frosts will reach the Southern limits of the country. 23rd to 25th, mild period. 26th to 28th, storm period. Storms of rain, sleet or snow quite general. High winds and squally conditions in the Northwest and along the Atlantic Coast. Temperature for February will range below average in most all Sections. Precipitation deficient in most all Sections of the United States.

DEMAND COW BRAND SODA IN PACKAGES



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

☉ Full Moon
☾ Last Quarter . . .
☽ New Moon
☽ First Quarter . . .

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.
8 5 14 Eve.
16 7 49 Mor.
22 11 21 Eve.
30 5 52 Mor.

D. H. M.
8 5 2 Eve.
16 7 37 Mor.
22 11 9 Eve.
30 5 40 Mor.

D. H. M.
8 4 13 Eve.
13 7 13 Mor.
22 10 45 Eve.
30 5 16 Mor.

Day of Mth	Day of Wk	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Slow	Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets and Rises
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	T.	Fonseca elect. Pres. of Brazil, 1910	☉	12 31	6 37	5 49	2 1	6 35	5 51	1 55	6 29	5 57	1 34			
2	F.	Ember Day.	☾	12 19	6 35	5 51	2 53	6 34	5 52	2 47	6 27	5 58	2 25			
3	S.	Ember Day.	☽	12 7	6 34	5 52	3 37	6 32	5 53	3 32	6 26	5 59	3 11			
4	S.	2nd Sunday in Lent.	☉	11 54	6 32	5 53	4 17	6 31	5 54	4 12	6 25	6 0	3 58			
5	M.	Eliz. B. Browning, poet, born, 1806	☉	11 40	6 30	5 54	4 50	6 29	5 55	4 46	6 23	6 0	4 30			
6	T.	G. W. Vanderbilt died, 1914	☉	11 26	6 28	5 55	5 18	6 28	5 56	5 15	6 22	6 1	5 4			
7	W.	Florida admitted as a State, 1845	☉	11 12	6 27	5 57	5 43	6 26	5 57	5 42	6 20	6 2	5 35			
8	T.	Henry Ward Beecher died, 1887	☉	10 57	6 25	5 58	Rises	6 24	5 59	Elises	6 19	6 3	Rises			
9	F.	Kaiser William died, 1888	☉	10 42	6 24	5 59	6 58	6 23	6 0	6 58	6 18	6 4	6 58			
10	S.	Cut-off Steam Valve pat., 1849	☉	10 27	6 22	6 0	8 2	6 21	6 1	8 1	6 17	6 4	7 56			
11	S.	3rd Sunday in Lent.	☉	10 11	6 20	6 1	9 7	6 19	6 2	9 4	6 16	6 5	8 55			
12	M.	Simon Newcomb, astron. born, 1835	☉	9 55	6 18	6 2	10 13	6 18	6 3	10 9	6 14	6 6	9 56			
13	T.	Great Western Blizzard, 1913	☉	9 38	6 17	6 4	11 19	6 16	6 4	11 14	6 13	6 7	10 57			
14	W.	Jamestown, N. Y., fire, 1910	☉	9 21	6 15	6 5	M'ng	6 15	6 5	M'ng	6 12	6 7	M'ng			
15	T.	Andrew Jackson born, 1776	☉	9 5	6 13	6 6	0 26	6 13	6 6	0 20	6 11	6 8	0 0			
16	F.	James Madison born, 1751	☉	8 47	6 12	6 7	1 29	6 11	6 7	1 24	6 9	6 9	1 2			
17	S.	St. Patrick's Day.	☉	8 30	6 10	6 8	2 25	6 10	6 8	2 21	6 8	6 9	2 0			
18	S.	4th Sunday in Lent.	☉	8 13	6 8	6 9	3 16	6 8	6 9	3 11	6 7	6 10	2 52			
19	M.	William Jennings Bryan born, 1860	☉	7 55	6 6	6 10	3 58	6 6	6 11	3 54	6 6	6 11	3 39			
20	T.	Spring begins.	☉	7 37	6 5	6 12	4 34	6 5	6 12	4 32	6 4	6 12	4 22			
21	W.	Days and nights equal.	☉	7 16	6 3	6 13	5 6	6 3	6 13	5 5	6 3	6 12	5 0			
22	T.	Great earthquake, Persia, 1879	☉	7 1	6 1	6 14	Sets	6 1	6 14	Sets	6 2	6 13	Sets			
23	F.	Richard A. Proctor born, 1837	☉	6 43	5 59	6 15	7 15	6 0	6 15	7 14	6 0	6 14	7 8			
24	S.	Fanny Crosby, hymn writer, born, 1820	☉	6 25	5 48	6 16	8 28	5 58	6 16	8 25	5 59	6 14	8 14			
25	S.	Passion Sunday.	☉	6 7	5 56	6 17	9 37	5 56	6 17	9 34	5 58	6 15	9 19			
26	M.	Cecil Rhodes died, 1902	☉	5 48	5 54	6 18	10 44	5 55	6 18	10 41	5 56	6 16	10 23			
27	T.	Florida discovered, 1512	☉	5 30	5 52	6 19	11 47	5 53	6 19	11 43	5 55	6 16	11 23			
28	W.	Treaty with Denmark, 1830	☉	5 12	5 51	6 20	M'ng	5 51	6 20	M'ng	5 53	6 17	M'ng			
29	T.	Swedenborg died, 1772	☉	4 53	5 49	6 22	0 45	5 50	6 21	0 39	5 52	6 18	0 17			
30	F.	Alaska purchased, 1867	☉	4 35	5 47	6 23	1 34	5 48	6 22	1 28	5 51	6 18	1 7			
31	S.	John C. Calhoun died, 1850	☉	4 17	5 45	6 24	2 14	5 46	6 23	2 10	5 49	6 19	1 51			

WEATHER FORECAST FOR MARCH, 1917

1st to 3rd, cold wave. Frost and frozen ground as far South as Northern Texas, Arkansas, Tennessee and North Carolina; Zero weather in Northern latitudes; rainy on Pacific Coast. 4th to 6th, threatening period. Snow in the West. 7th to 11th, storm and rain period. Heavy rains over Central and Southern Sections; snow storms in the Rocky Mountains, Missouri Valley and Lake region; gales along the Atlantic Coast. 12th to 15th, cold wave. Raw cold winds from the Northwest, with low temperature as far South as Texas, Arkansas and Northern Georgia; temperature near Zero in Upper Missouri Valley and Lake region. 16th to 21st, mild period. Fine spring-like weather in Central, Southern and Eastern Sections; mild weather for the season in States bordering on the Canadian Northwest and Lake region. 22nd to 26th, storm wave. High winds and rain, sleet and snow common to all Sections; cold weather in the North and Northwest. 27th to 31st, warm wave. Rising temperature in most all Sections of the United States; slush and mud in Northern States. Showers will be quite general on the 29th and 30th. Temperature for March will be below average in most all Sections of the country. Precipitation will be near the average at nearly all points.

DEMAND COW BRAND SODA IN PACKAGES



**USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST**

☉ Full Moon
☾ Last Quarter . . .
☾ New Moon
☽ First Quarter. . .

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

D. H. M.
7 9 5 Mor.
14 3 28 Eve.
21 9 17 Mor.
29 0 38 Eve.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

D. H. M.
7 8 53 Mor.
14 3 16 Eve.
21 9 5 Mor.
29 0 26 Eve.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.
7 8 29 Mor.
14 2 52 Eve.
21 8 41 Mor.
29 0 2 Eve.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Slow	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets and Rises	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	S.	Palm Sunday.	☉	3 59	5 44	6 25	2 50	5 46	6 23	2 46	5 48	6 20	2 29
2	M.	Simplon Tunnel opened, 1905	☉	3 41	5 42	6 26	3 21	5 45	6 24	3 17	5 47	6 21	3 4
3	T.	Civil War ended, 1866	☉	3 23	5 40	6 27	3 48	5 43	6 26	3 45	5 46	6 22	3 37
4	W.	First Known Telephone, 1877	☉	3 5	5 39	6 28	4 13	5 42	6 27	4 11	5 44	6 22	4 6
6	T.	Jess Willard defeated Jack Johnson, 1915	☉	2 47	5 37	6 29	4 35	5 40	6 28	4 35	5 43	6 23	4 34
6	F.	Good Friday.	☉	2 30	5 35	6 30	4 59	5 38	6 29	5 0	5 42	6 24	5 3
7	S.	First day of Passover.	☉	2 12	5 33	6 31	Rises	5 36	6 30	Rises	5 41	6 24	Rises
8	S.	Easter Sunday.	☉	1 55	5 31	6 32	8 3	5 34	6 31	7 58	5 39	6 25	7 45
9	M.	Geo. Peacock born, 1791	☉	1 39	5 30	6 34	9 10	5 33	6 32	9 6	5 38	6 26	8 49
10	T.	Tom L. Johnson died, 1911	☉	1 22	5 28	6 35	10 18	5 31	6 33	10 13	5 37	6 26	9 53
11	W.	Mary Wire, writer, born, 1838	☉	1 6	5 27	6 36	11 23	5 29	6 34	11 17	5 36	6 27	10 56
12	T.	Miss Clara Barton died, 1912	☉	0 50	5 25	6 37	M'ng	5 28	6 35	M'ng	5 34	6 28	11 54
13	F.	Food Riots in London, 1795	☉	0 34	5 23	6 39	0 21	5 26	6 36	0 15	5 33	6 28	M'ng
14	S.	Senator M. C. Butler died, 1909	☉	0 19	5 22	6 40	1 12	5 25	6 37	1 7	5 32	6 29	0 47
15	S.	Low Sunday.	☉	Fast	5 20	6 41	1 55	5 24	6 38	1 51	5 30	6 30	1 35
16	M.	First railway in India opened, 1853	☉	0 10	5 19	6 42	2 33	5 22	6 39	2 29	5 29	6 30	2 18
17	T.	Sanford C. Hill died, 1871	☉	0 24	5 17	6 43	3 5	5 21	6 40	3 3	5 28	6 31	2 56
18	W.	Booker T. Washington born, 1856	☉	0 38	5 15	6 44	3 34	5 19	6 41	3 34	5 27	6 32	3 32
19	T.	6th Mass. Reg't at Baltimore, 1861	☉	0 51	5 14	6 45	4 1	5 17	6 42	4 3	5 26	6 33	4 5
20	F.	Great fire, Toronto, 1904	☉	1 4	5 12	6 46	4 29	5 16	6 43	4 31	5 25	6 33	4 39
21	S.	Spanish-American War begun, 1898	☉	1 17	5 11	6 47	Sets	5 14	6 45	Sets	5 24	6 34	Sets
22	S.	2nd Sunday after Easter.	☉	1 20	5 9	6 48	8 26	5 13	6 46	8 22	5 23	6 35	8 5
23	M.	Gen. Butler at New Orleans, 1862	☉	1 41	5 8	6 49	9 32	5 12	6 47	9 27	5 22	6 36	9 8
24	T.	Mall Steamship Asia sank, 1911	☉	1 52	5 6	6 50	10 32	5 10	6 48	10 27	5 20	6 36	10 6
25	W.	J. Wilkes Booth captured, 1865	☉	2 3	5 5	6 51	11 25	5 9	6 49	11 19	5 19	6 37	10 58
26	T.	I. O. O. F. instituted in U. S., 1819	☉	2 13	5 3	6 52	M'ng	5 8	6 50	M'ng	5 18	6 38	11 44
27	F.	First Oil Well discovered, 1858	☉	2 23	5 2	6 54	0 8	5 6	6 51	0 3	5 17	6 38	M'ng
28	S.	James Monroe born, 1758	☉	2 32	5 0	6 55	0 45	5 5	6 52	0 41	5 16	6 39	0 24
29	S.	3rd Sunday after Easter.	☉	2 41	4 59	6 56	1 19	5 3	6 53	1 15	5 15	6 40	1 0
30	M.	Geo. Washington Inaugurated, 1789	☉	2 49	4 58	6 57	1 48	5 2	6 54	1 45	5 14	6 41	1 35

WEATHER FORECAST FOR APRIL, 1917

1st to 3rd, cool wave. Killing frosts doing much damage in the Middle South and down to Florida; mercury as low as 15 above Zero in Northern States. 4th to 7th, Mercury storm period. The Mercury periods are remarkable for their intensity and rapidly shifting character. Expect violent electrical displays with high winds and heavy rains over the South, Middle Sections and along the Atlantic Slope. Rains will turn to sleet and snow in Northern States. 8th to 10th, cool wave. Killing frosts as far South as the 36th parallel. 11th to 14th, mild period. Warm, growing weather from Texas and Oklahoma to the Atlantic; cool nights and sunny days in Western and Northern States. 15th to 18th, showery period. Thunder storms, accompanied with heavy rains and hail over the South and Middle Sections; showers in the West and North. 19th to 23rd, warm wave. Rather warm for April in nearly all parts of the country. Showers will occur in the West and Northern States, with danger of tornadoes, especially in Texas, Oklahoma, Kansas and Missouri. 24th to 27th, severe storm period. Heavy rain-falls very generally throughout the Middle West and South; severe storms along the Atlantic Coast. 28th to 30th, thunder showers over the South and cool, backward weather in the West and North. Month cooler than the average. Rain-fall above average.

DEMAND COW BRAND SODA IN PACKAGES



**USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST**

☉ Full Moon
☾ Last Quarter . . .
☾ New Moon
☽ First Quarter . . .

**For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.**

D. H. M.
6 9 59 Eve.
13 9 4 Eve.
20 8 3 Eve.
28 6 50 Eve.

**For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.**

D. H. M.
6 9 47 Eve.
13 8 52 Eve.
20 7 51 Eve.
28 6 38 Eve.

**For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.**

D. H. M.
6 9 23 Eve.
13 8 28 Eve.
20 7 27 Eve.
28 6 14 Eve.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Fast	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	T.	Chicago Exposition open, 1893	Ω	2 57	4 55	6 59	2 12	5 0	6 55	2 12	5 13	6 41	2 6
2	W.	Hudson Bay Co., Inc., 1670	Ω	3 5	4 54	7 0	2 37	4 59	6 56	2 37	5 12	6 42	2 34
3	T.	Italians captured Isle of Rhodes, 1912	♍	3 11	4 53	7 1	3 0	4 58	6 57	3 1	5 11	6 43	3 3
4	F.	Chicago Anarchist Riot, 1886	♍	3 18	4 51	7 2	3 24	4 57	6 58	3 26	5 10	6 43	3 32
5	S.	Wm. T. Sampson died, 1902	♎	3 23	4 50	7 3	3 49	4 56	6 59	3 52	5 9	6 44	4 3
6	S.	4th Sunday after Easter.	♎	3 28	4 49	7 5	Rises	4 55	7 0	Rises	5 8	6 45	Rises
7	M.	Anton Seldi, musician, born, 1850	♏	3 33	4 48	7 6	8 4	4 54	7 1	7 59	5 7	6 46	7 41
8	T.	Eruption of Mt. Pelee, 1902	♏	3 37	4 46	7 7	9 15	4 53	7 2	9 6	5 6	6 46	8 46
9	W.	Dewey made rear admiral, 1898	♏	3 40	4 45	7 8	10 15	4 52	7 4	10 9	5 6	6 47	9 48
10	T.	(9) Pacific Railway opened, 1869	♏	3 43	4 44	7 9	11 9	4 51	7 5	11 3	5 5	6 48	10 44
11	F.	Columbia River disc., 1792	♏	3 46	4 43	7 10	11 56	4 50	7 6	11 50	5 4	6 49	11 22
12	S.	San Juan bombarded, 1898	♏	3 47	4 42	7 11	M'ng	4 49	7 7	M'ng	5 3	6 49	M'ng
13	S.	Rogation Sunday.	♏	3 48	4 41	7 12	0 32	4 48	7 8	0 29	5 2	6 50	0 16
14	M.	Great Strike at Pullman, 1894	♏	3 49	4 40	7 13	1 6	4 47	7 9	1 4	5 2	6 51	0 55
15	T.	Erle Railroad opened, 1851	♏	3 49	4 39	7 14	1 34	4 46	7 10	1 34	5 1	6 52	1 31
16	W.	Battle of Champion's Hill, 1863	♏	3 48	4 38	7 15	2 2	4 45	7 11	2 3	5 0	6 52	2 4
17	T.	Ascension Day.	♏	3 47	4 37	7 16	2 30	4 44	7 11	2 32	5 0	6 53	2 37
18	F.	Battleship Texas launched, 1912	♏	3 45	4 36	7 17	3 0	4 43	7 13	3 2	4 59	6 54	3 13
19	S.	Spanish fleet at Santiago, 1898	♏	3 42	4 35	7 18	3 31	4 42	7 13	3 35	4 58	6 54	3 50
20	S.	Sunday after Ascension.	♏	3 39	4 34	7 19	Sets	4 42	7 14	Sets	4 58	6 55	Sets
21	M.	McKinley Tariff Bill passed, 1890	♏	3 36	4 33	7 20	8 18	4 41	7 15	8 12	4 57	6 56	7 52
22	T.	U. S. and Cuban Treaty, 1903	♏	3 32	4 32	7 21	9 15	4 40	7 16	9 9	4 57	6 56	8 48
23	W.	Italy declared war on Austria, 1915	♏	3 27	4 31	7 22	10 3	4 39	7 17	9 57	4 56	6 57	9 37
24	T.	Brooklyn Bridge finished, 1883	♏	3 22	4 30	7 23	10 43	4 38	7 18	10 38	4 56	6 58	10 20
25	F.	Ralph Waldo Emerson born, 1803	♏	3 17	4 30	7 24	11 17	4 38	7 19	11 13	4 55	6 58	10 53
26	S.	John Calvin died, 1564	♏	3 10	4 29	7 25	11 47	4 37	7 19	11 44	4 55	6 59	11 33
27	S.	Pentecost Sunday.	♏	3 4	4 28	7 26	M'ng	4 37	7 20	M'ng	4 54	7 0	M'ng
28	M.	Louis Agassiz born, 1807	♏	2 57	4 28	7 27	0 15	4 36	7 21	0 12	4 54	7 0	0 4
29	T.	Wisconsin admitted, 1848	♏	2 49	4 27	7 27	0 37	4 35	7 22	0 37	4 54	7 1	0 23
30	W.	Memorial Day.	♏	2 42	4 27	7 28	1 2	4 34	7 22	1 2	4 53	7 1	1 1
31	T.	Jamestown, Pa., flood, 1889	♏	2 33	4 26	7 29	1 24	4 33	7 23	1 26	4 53	7 2	1 30

WEATHER FORECAST FOR MAY, 1917

1st to 4th, storm period. This is a Venus-Jupiter period, hence look for many violent storms, heavy rains, hail and severe electrical disturbances. In Northern and Northwestern States the weather will be cold, with frequent snows. 5th to 8th, cool wave. Cool, frosty nights as far South as Kansas, Missouri, Kentucky, West Virginia and Maryland. 9th to 13th, warm wave. Warm, growing weather covering most parts of the country from Colorado to the Atlantic; showers in the far Northwest and East Gulf States. 14th to 17th, storm period. This period will bring general rains in the Middle West, Central Valleys and Gulf States and high winds and heavy rains on the Atlantic Slope. 18th and 19th, fair and very warm. 20th to 23rd, Mercury-Venus storm period, bringing heavy rains, violent wind and hail storms in many parts of the country; floods in the Missouri and Mississippi River Valleys. 24th to 27th, showery period. In some Sections severe storms and heavy rains will occur, but generally the weather will be favorable for growing crops. 28th to 31st, warm, dry period. Summer-like warmth from Colorado to the Atlantic; tendency to drouth in Texas, Oklahoma, Kansas, Nebraska and portions of the East Gulf States. Month will be slightly cooler than average. Rain-fall will be much above average over Central Valleys.

DEMAND COW BRAND SODA IN PACKAGES



**USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST**

☉ Full Moon
☾ Last Quarter . . .
☾ New Moon
☀ First Quarter. . .

**For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas, Oregon.**

**For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.**

**For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.**

D. H. M.
5 8 23 Mor.
12 1 55 Mor.
19 8 18 Mor.
27 11 24 Mor.

D. H. M.
5 8 11 Mor.
12 1 43 Mor.
19 8 6 Mor.
27 11 12 Mor.

D. H. M.
5 7 47 Mor.
12 1 19 Mor.
19 7 42 Mor.
27 10 48 Mor.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Fast	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	F.	Ember Day.	☾	2 25	4 26	7 30	1 51	4 32	7 24	1 53	4 53	7 3	2 1
2	S.	Ember Day.	☾	2 16	4 25	7 30	2 19	4 32	7 24	2 22	4 52	7 3	2 35
3	S.	Trinity Sunday.	☾	2 6	4 25	7 31	2 51	4 31	7 25	2 56	4 52	7 4	3 12
4	M.	First house built in Oregon, 1810	☾	1 56	4 25	7 32	3 30	4 31	7 26	3 36	4 52	7 4	3 56
5	T.	French occupy City of Mexico, 1863	☾	1 46	4 24	7 32	Rises	4 30	7 26	Rises	4 52	7 5	Rises
6	W.	Capt. R. F. Cott born, 1868	☾	1 36	4 24	7 33	9 2	4 30	7 27	8 55	4 52	7 5	8 35
7	T.	Corpus Christi.	☾	1 25	4 23	7 34	9 51	4 29	7 27	9 46	4 51	7 6	9 28
8	F.	Sec'y Wm. J. Bryan resigns, 1915	☾	1 14	4 23	7 34	10 34	4 29	7 28	10 30	4 51	7 6	10 15
9	S.	Jan-Russian War ends, 1904	☾	1 2	4 23	7 35	11 9	4 29	7 28	11 6	4 51	7 7	10 57
10	S.	1st Sunday after Trinity.	☾	0 50	4 23	7 35	11 40	4 28	7 29	11 38	4 51	7 7	11 33
11	M.	Comstock Lode discovered, 1859	☾	0 39	4 22	7 36	M'ng	4 28	7 30	M'ng	4 51	7 8	M'ng
12	T.	New York incorporated, 1665	☾	0 27	4 22	7 36	0 8	4 28	7 30	0 8	4 51	7 8	0 7
13	W.	Slave Law repealed, 1864	☾	0 14	4 22	7 37	0 32	4 28	7 31	0 36	4 51	7 8	0 40
14	T.	Pres. Penna of Brazil died, 1909	☾	Slow	4 22	7 37	1 2	4 28	7 31	1 5	4 51	7 9	1 14
15	F.	Paris inundated, 1914	☾	0 10	4 22	7 38	1 30	4 28	7 32	1 35	4 51	7 9	1 49
16	S.	Great eclipse, 1806	☾	0 23	4 22	7 38	2 5	4 28	7 32	2 10	4 51	7 9	2 27
17	S.	2nd Sunday after Trinity.	☾	0 36	4 22	7 38	2 43	4 28	7 32	2 49	4 51	7 10	3 9
18	M.	War declared against England, 1812	☾	0 49	4 22	7 39	3 28	4 28	7 33	3 34	4 51	7 10	3 56
19	T.	Cervera entered Santiago, 1898	☾	1 2	4 23	7 39	Sets	4 28	7 33	Sets	4 51	7 10	Sets
20	W.	Panama floods, 1909	☾	1 15	4 23	7 39	8 40	4 28	7 33	8 34	4 52	7 10	8 15
21	T.	Summer begins.	☾	1 28	4 23	7 40	9 17	4 28	7 33	9 12	4 52	7 11	8 55
22	F.	Geo. V. crowned King of E., 1911	☾	1 41	4 23	7 40	9 49	4 28	7 34	9 45	4 52	7 11	9 31
23	S.	Prince of Wales born, 1894	☾	1 54	4 23	7 40	10 17	4 29	7 34	10 14	4 52	7 11	10 5
24	S.	3rd Sunday after Trinity.	☾	2 7	4 24	7 40	10 42	4 29	7 34	10 40	4 53	7 11	10 34
25	M.	Grover Cleveland died, 1908	☾	2 20	4 24	7 40	11 4	4 29	7 34	11 4	4 53	7 11	11 3
26	T.	George IV. died, 1830	☾	2 33	4 24	7 40	11 27	4 29	7 34	11 28	4 53	7 11	11 30
27	W.	Joseph Smith, Mormon, shot, 1844	☾	2 46	4 25	7 40	11 50	4 30	7 34	11 52	4 53	7 12	11 58
28	T.	Earthquake in Italy, 1913	☾	2 58	4 25	7 40	M'ng	4 30	7 35	M'ng	4 54	7 12	M'ng
29	F.	Henry Clay died, 1852	☾	3 10	4 25	7 40	0 18	4 30	7 35	0 20	4 54	7 12	0 30
30	S.	First R. R. in China, 1876	☾	3 22	4 26	7 40	0 46	4 30	7 35	0 50	4 54	7 12	1 5

WEATHER FORECAST FOR JUNE, 1917

1st to 4th, fair period. 5th to 8th, storm wave. Showery conditions over the West, South and East; severe electrical storms in Texas, Oklahoma, Tennessee and Kentucky. 9th to 11th, cool spell. Fine days and cool, pleasant nights over the Northwest, Lake region, Great Central Valleys and Eastern Sections; light showers in the Rocky Mountain regions and in the Gulf States. 12th to 17th, hot wave. Prostrating heat and drouth manifest in most Sections of the West and Northwest; absence of rain felt in Texas, Oklahoma, Kansas, Nebraska, Missouri, Illinois, Kentucky, Tennessee, West Virginia, North Carolina and Georgia. 18th to 21st, Venus-Mars storm period. This will be a period of great electrical activity over a large portion of the country. Showers will occur over wide extended areas, but as a rule the rain-fall will be less than normal, except in Eastern Sections. Floods will occur in New York and New Jersey. 22nd and 23rd, cool wave. Light frosts probable in Northern States. 24th to 27th, warm wave. High range of temperature at all points; temperature near 100 degrees in Texas, Oklahoma, Kansas, Missouri and Tennessee; crops needing rain in many places. 28th to 30th, storm period. Heavy rain and severe hail storms in Missouri Valley and East Gulf States; local showers in other Sections, damage to crops by high winds and hail. Temperature for June about normal. Rain-fall below average.

DEMAND COW BRAND SODA IN PACKAGES



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

- ☉ Full Moon
- ☾ Last Quarter . . .
- ☾ New Moon
- ☽ First Quarter, . .

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

D. H. M.	4	4	57 Eve.
	11	7	28 Mor.
	18	10	16 Eve.
	27	1	20 Mor.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

D. H. M.	4	4	45 Eve.
	11	7	16 Mor.
	18	10	4 Eve.
	27	1	8 Mor.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.	4	4	21 Eve.
	11	6	52 Mor.
	18	9	40 Eve.
	27	0	44 Mor.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Slow	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	S.	4th Sunday after Trinity.		3 34	4 26	7 40	1 20	4 31	7 35	1 26	4 55	7 12	1 45
2	M.	President Garfield shot, 1881	m	3 45	4 27	7 40	2 4	4 31	7 34	2 11	4 55	7 12	2 33
3	T.	John P. Morgan shot, 1915	m	3 56	4 27	7 40	3 1	4 32	7 34	3 7	4 56	7 12	3 30
4	W.	Independence Day.	☽	4 7	4 28	7 40	Rises	4 33	7 34	Rises	4 56	7 12	Rises
5	T.	Bishop Newman died, 1899	☽	4 18	4 28	7 40	8 29	4 33	7 33	8 28	4 57	7 11	8 8
6	F.	John Paul Jones born, 1747	☽	4 28	4 29	7 39	9 7	4 34	7 33	9 4	4 57	7 11	8 53
7	S.	Hawaii annexed to U. S., 1898	☽	4 38	4 29	7 39	9 41	4 35	7 33	9 39	4 58	7 11	9 33
8	S.	5th Sunday after Trinity.	☽	4 48	4 30	7 39	10 10	4 35	7 33	10 10	4 59	7 11	10 8
9	M.	Crimean War ends, 1855	☽	4 56	4 31	7 38	10 38	4 36	7 32	10 39	4 59	7 11	10 42
10	T.	Wyoming admitted as a State, 1890	X	5 5	4 32	7 38	11 8	4 36	7 32	11 8	4 59	7 10	11 16
11	W.	John Quincy Adams born, 1767	X	5 13	4 33	7 37	11 36	4 37	7 32	11 39	5 0	7 10	11 15
12	T.	German Victory at Souchez, 1915	☽	5 21	4 33	7 37	M'ng	4 38	7 31	M'ng	5 0	7 10	M'ng
13	F.	Diamonds disc. in S. Africa, 1871	☽	5 29	4 34	7 36	0 8	4 39	7 31	0 12	5 1	7 9	0 29
14	S.	Paul Kruger died, 1904	☽	5 36	4 35	7 36	0 44	4 40	7 30	0 49	5 1	7 9	1 8
15	S.	6th Sunday after Trinity.	☽	5 42	4 36	7 35	1 26	4 40	7 30	1 32	5 2	7 9	1 53
16	M.	Mrs. Eddy, Christian Science, born, 1821	☽	5 49	4 36	7 34	2 13	4 41	7 29	2 19	5 3	7 8	2 42
17	T.	Mine disaster in Sicily, 1913	☽	5 54	4 37	7 34	3 6	4 42	7 29	3 12	5 3	7 8	3 35
18	W.	Eclipse of Sun invisible.	☽	5 59	4 38	7 33	Sets	4 43	7 28	Sets	5 4	7 7	Sets
19	T.	Mine explosion in Colo., 1912	☽	6 4	4 39	7 32	7 51	4 44	7 28	7 47	5 5	7 7	7 33
20	F.	Pope Leo XII. died, 1903	☽	6 8	4 40	7 31	8 20	4 45	7 27	8 17	5 5	7 6	8 6
21	S.	Robt. G. Ingersoll died, 1899	☽	6 11	4 41	7 30	8 45	4 46	7 26	8 43	5 6	7 6	8 36
22	S.	7th Sunday after Trinity.	☽	6 14	4 42	7 30	9 8	4 46	7 25	9 7	5 7	7 5	9 5
23	M.	French Atlantic Cable comp., 1869	☽	6 16	4 43	7 29	9 30	4 47	7 24	9 31	5 7	7 5	9 32
24	T.	Salt Lake City founded, 1847	☽	6 18	4 44	7 28	9 51	4 48	7 23	9 55	5 8	7 4	10 0
25	W.	Pennsylvania Railroad opened, 1857	☽	6 19	4 44	7 28	10 18	4 49	7 22	10 21	5 8	7 4	10 30
26	T.	Dog Days begin.	☽	6 19	4 45	7 27	10 46	4 50	7 21	10 49	5 9	7 3	11 3
27	F.	Helen Keller born, 1880	☽	6 19	4 46	7 26	11 18	4 51	7 20	11 23	5 10	7 2	11 40
28	S.	Austria declared war on Serbia, 1914	☽	6 18	4 47	7 25	11 58	4 52	7 19	M'ng	5 10	7 1	M'ng
29	S.	8th Sunday after Trinity.	☽	6 17	4 48	7 23	M'ng	4 52	7 19	0 2	5 11	7 1	0 22
30	M.	Bismarck died, 1898	☽	6 15	4 49	7 22	0 44	4 53	7 18	0 50	5 12	7 0	1 12
31	T.	Andrew Johnson died, 1875	☽	6 12	4 50	7 21	1 42	4 54	7 18	1 48	5 12	6 59	2 11

WEATHER FORECAST FOR JULY, 1917

1st to 4th, hot wave. High range of temperature felt at all points except in the extreme highland regions; want of rain felt on Pacific Slope, States of the Northwest, Middle West and Lake region; local drouths in many other Sections. 5th to 8th, Mercury storm period. Severe thunder storms, accompanied with wind, rain and hail in many places; heavy rains in East Gulf States, upper Mississippi River Valley and along Atlantic Slope. 9th to 14th, hot period. Drouth and heat felt in the far West, Northwest, Lake region and locally over the Central Valleys and Southern States; temperature ranging from 96 degrees to 100 degrees. 15th to 19th, Mercury-Venus storm period. Showers and severe thunder storms over most Sections of the West, Central and Eastern Sections; damaging wind storms in many places. Heavy rains will fall in the Gulf States. 20th to 22nd, cool, pleasant period. 23rd to 26th, storm period. Continued sultriness in forenoons followed by violent storm energy during afternoons and nights over many Sections of the country—tornadoes probable in some few localities. 27th to 31st, hot wave. Crops will be damaged by severe drouth and great heat; prostration from sunstroke in many large cities. Mean temperature for July will be much above normal, with a great deficiency in rain-fall.

DEMAND COW BRAND SODA IN PACKAGES



**USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST**

☉ Full Moon
☾ Last Quarter . . .
☾ New Moon
☽ First Quarter . . .

**For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.**

D. H. M.
3 0 27 Mor.
9 3 13 Eve.
17 1 37 Eve.
25 2 24 Eve.

**For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.**

D. H. M.
3 0 15 Mor.
9 3 0 Eve.
17 1 25 Eve.
25 2 12 Eve.

**For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.**

D. H. M.
2 11 51 Eve.
9 2 36 Eve.
17 1 1 Eve.
25 1 48 Eve.

Day of M th	Day of W ^{rk}	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Slow	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets	Sun Rises	Sun Sets	Moon Sets
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	W.	Germany decl. war on Russia, 1914	☾	6 9	4 51	7 20	2 55	4 55	7 17	2 59	5 13	6 58	3 17
2	T.	Pennsylvania mine explosion, 1913	☾	6 5	4 52	7 19	Rises	4 56	7 16	Rises	5 14	6 57	Rises
3	F.	Welland Canal first used, 1830	☾	6 1	4 53	7 18	7 38	4 57	7 15	7 36	5 15	6 57	7 27
4	S.	Eng. declared war on Germ., 1914	☾	5 56	4 54	7 17	8 9	4 58	7 14	8 8	5 15	6 56	8 4
5	S.	9th Sunday after Trinity.	☾	5 50	4 55	7 15	8 40	4 59	7 12	8 40	5 16	6 55	8 41
6	M.	Alfred Tennyson born, 1809	☾	5 44	4 57	7 14	9 10	5 0	7 11	9 11	5 17	6 54	9 16
7	T.	Cruiser Amphion sunk, 1914	☾	5 37	4 58	7 13	9 39	5 1	7 9	9 41	5 17	6 53	9 52
8	W.	First Steamer on Hudson, 1807	☾	5 30	4 59	7 11	10 11	5 2	7 8	10 14	5 18	6 52	11 29
9	T.	Servia declared war on Germ., 1914	☾	5 22	5 0	7 10	10 46	5 3	7 7	10 50	5 19	6 51	11 9
10	F.	War in Balkans ends, 1913	☾	5 13	5 1	7 9	11 26	5 4	7 6	11 31	5 19	6 50	11 53
11	S.	Montenegro decl. war on Germ. 1914	☾	5 4	5 2	7 8	M'ng	5 5	7 5	M'ng	5 20	6 49	M'ng
12	S.	10th Sunday after Trinity.	☾	4 54	5 3	7 6	0 11	5 6	7 4	0 17	5 21	6 48	0 40
13	M.	Manila surrendered to U. S., 1898	☾	4 44	5 4	7 5	1 3	5 7	7 3	1 8	5 21	6 47	1 31
14	T.	Jeffries defeated Corbett, 1903	☾	4 33	5 5	7 3	1 58	5 8	7 1	2 3	5 22	6 46	2 24
15	W.	Great Tropical storm, Texas, 1915	☾	4 22	5 6	7 2	2 57	5 9	7 0	3 1	5 23	6 45	3 20
16	T.	Gas first used in London, 1807	☾	4 10	5 7	7 0	3 57	5 10	6 58	4 0	5 24	6 44	4 17
17	F.	Hurricane in Texas, 1915	☾	3 58	5 8	6 59	Sets	5 11	6 57	Sets	5 24	6 43	Sets
18	S.	Trouble in Turkey, 1903	☾	3 45	5 9	6 57	7 15	5 12	6 55	7 14	5 25	6 42	7 10
19	S.	11th Sunday after Trinity.	☾	3 32	5 10	6 56	7 36	5 13	6 54	7 36	5 26	6 40	7 36
20	M.	England takes Suez Canal, 1882	☾	3 18	5 11	6 54	7 59	5 14	6 52	8 0	5 26	6 39	8 3
21	T.	Gen. Franz Sigel died, 1902	☾	3 4	5 12	6 53	8 23	5 15	6 50	8 25	5 27	6 38	8 33
22	W.	John B. Gough born, 1817	☾	2 49	5 13	6 51	8 50	5 16	6 49	8 53	5 28	6 37	9 5
23	T.	Japan decl. war on Germ., 1914	☾	2 34	5 14	6 50	9 18	5 17	6 48	9 22	5 28	6 36	9 33
24	F.	Capitol at Washington burned, 1814	☾	2 18	5 15	6 49	9 52	5 18	6 47	9 57	5 29	6 35	10 16
25	S.	Austria decl. war on Japan, 1914	☾	2 2	5 16	6 47	10 34	5 19	6 46	10 40	5 30	6 34	11 2
26	S.	12th Sunday after Trinity.	☾	1 46	5 18	6 45	11 26	5 20	6 44	11 33	5 31	6 33	11 56
27	M.	Great tornado, Louisville, 1854	☾	1 29	5 19	6 43	M'ng	5 21	6 42	M'ng	5 32	6 31	M'ng
28	T.	Naval Battle near Helgoland, 1914	☾	1 11	5 20	6 42	0 30	5 22	6 41	0 35	5 32	6 30	0 57
29	W.	Brigham Young died, 1877	☾	0 54	5 21	6 40	1 40	5 23	6 40	1 44	5 33	6 29	2 4
30	T.	Germans captured Amlens, 1914	☾	0 36	5 22	6 39	2 56	5 24	6 38	2 59	5 34	6 27	3 15
31	F.	Charleston earthquake, 1886	☾	0 17	5 23	6 37	4 15	5 25	6 37	4 17	5 34	6 26	4 29

WEATHER FORECAST FOR AUGUST, 1917

1st to 3rd, sultry wave. Great heat and drouth felt in practically all parts of the United States, being most severe in the Rocky Mountain regions, Texas, Oklahoma and Kansas. 4th to 6th, thunder storms. Heavy rain-fall over the Appalachian Mountains; showers and severe thunder storms in the Southwest, Central Valleys and Lake region. 7th to 9th, cool wave. Northerly winds and generally fair. 10th to 14th, hot wave period. Extensive drouths covering the greater part of the country; great electrical storms in the Northwest, Ohio River Valley and Atlantic Slope. 15th to 19th, storm period. General rains in the Southwest, East Gulf States, Lake region and along entire Atlantic Slope. 20th to 24th, hot, dry period. High range of temperature in nearly all Sections of the United States; great drouth covering the country West of the Mississippi River; local drouths in the Lake regions, Ohio River Valley and Tennessee. 25th to 27th, severe thunder storms from the Gulf to the Great Lakes; local showers over the West, Central Valleys, Gulf and Atlantic States. 28th to 31st, hot, dry period. Rain needed on Pacific Slope, Rocky Mountains, West Gulf States, Plain States and Great Central Valleys. Mean temperature for August will be much above normal, with a great deficiency in rain-fall, except in South Atlantic States, where it will be excessive.

DEMAND COW BRAND SODA IN PACKAGES



USE ARM AND
HAMMER SODA
IN PACKAGES—
IT IS THE BEST

- ☉ Full Moon
- ☾ Last Quarter . . .
- ☾ New Moon
- ☾ First Quarter . . .
- ☉ Full Moon

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

D. H. M.		
1	7	45 Mor.
8	2	21 Mor.
16	5	54 Mor.
24	0	57 Mor.
30	3	47 Eve.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

D. H. M.		
1	7	33 Mor.
8	2	9 Mor.
16	5	32 Mor.
24	0	45 Mor.
30	3	35 Eve.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.		
1	7	9 Mor.
8	1	45 Mor.
16	5	8 Mor.
24	0	21 Mor.
30	3	11 Eve.

Day of M th	Day of W ^k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Fast	Sun Rises	Sun Sets	Moon Rises	Sun Rises	Sun Sets	Moon Rises	Sun Rises	Sun Sets	Moon Rises
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	S.	General Banks died, 1894	☾	0 0	5 24	6 35	6 24	5 26	6 35	6 24	5 34	6 25	6 23
2	S.	13th Sunday after Trinity.	☾	0 20	5 25	6 33	7 8	5 27	6 33	7 9	5 35	6 24	7 12
3	M.	Labor Day.	☾	0 39	5 26	6 32	7 38	5 28	6 31	7 40	5 36	6 22	7 47
4	T.	Steamer Indian Prince sunk, 1914	☾	0 58	5 27	6 30	8 10	5 29	6 30	8 13	5 36	6 21	8 26
5	W.	Cruiser Pathfinder sunk, 1914	☾	1 18	5 28	6 28	8 46	5 30	6 28	8 50	5 37	6 20	9 7
6	T.	Battle of the Marne, 1914	☾	1 38	5 29	6 27	9 24	5 31	6 26	9 30	5 37	6 18	9 50
7	F.	Independence of Brazil, 1822	☾	1 58	5 30	6 25	10 8	5 32	6 24	10 15	5 38	6 17	10 37
8	S.	Gen. H. C. Corbin died, 1909	☾	2 19	5 32	6 23	10 57	5 33	6 23	11 4	5 39	6 16	11 27
9	S.	14th Sunday after Trinity.	☾	2 39	5 33	6 22	11 53	5 34	6 21	11 58	5 39	6 14	M'ng
10	M.	Battle of Lake Erie, 1813	☾	3 0	5 34	6 20	M'ng	5 35	6 19	M'ng	5 40	6 13	0 20
11	T.	Battle of Lake Champlain, 1814	☾	3 21	5 35	6 18	0 51	5 36	6 17	0 55	5 41	6 12	1 15
12	W.	Richard M. Hoe, Inventor, born, 1812	☾	3 42	5 36	6 16	1 51	5 37	6 16	1 54	5 41	6 10	2 11
13	T.	City of Mexico taken by U. S., 1847	☾	4 3	5 37	6 14	2 52	5 38	6 14	2 53	5 42	6 9	3 7
14	F.	J. F. Cooper born, 1789	☾	4 24	5 38	6 13	3 50	5 39	6 13	3 51	5 43	6 8	4 2
15	S.	Pocket Watch invented, 1510	☾	4 45	5 39	6 11	4 50	5 40	6 11	4 50	5 43	6 6	4 55
16	S.	15th Sunday after Trinity.	☾	5 6	5 40	6 10	Sets	5 41	6 9	Sets	5 44	6 5	Sets
17	M.	Hebrew New Year.	☾	5 27	5 41	6 9	6 29	5 42	6 7	6 31	5 45	6 4	6 37
18	T.	Cotton Gin invented 1793	☾	5 48	5 42	6 7	6 53	5 43	6 5	6 56	5 45	6 2	7 7
19	W.	Ember Day.	☾	6 10	5 43	6 6	7 23	5 44	6 4	7 27	5 46	6 1	7 41
20	T.	Ship Bengal wrecked, 1908	☾	6 31	5 44	6 4	7 56	5 45	6 2	8 1	5 47	6 0	8 19
21	F.	Ember Day.	☾	6 52	5 45	6 2	8 35	5 45	6 0	8 40	5 47	5 58	9 1
22	S.	Ember Day.	☾	7 13	5 46	6 0	9 21	5 46	5 59	9 27	5 48	5 57	9 40
23	S.	16th Sunday after Trinity.	☾	7 34	5 47	5 58	10 18	5 47	5 57	10 23	5 49	5 56	10 45
24	M.	Marcus A. Hanna born, 1837	☾	7 55	5 49	5 58	11 23	5 48	5 56	11 27	5 50	5 54	11 48
25	T.	Pacific Ocean discovered, 1513	☾	8 15	5 50	5 54	M'ng	5 49	5 54	M'ng	5 50	5 53	M'ng
26	W.	Yom Kippur.	☾	8 36	5 51	5 52	0 34	5 50	5 53	0 37	5 51	5 52	0 55
27	T.	Statue of Liberty unveiled, 1887	☾	8 56	5 52	5 50	1 50	5 51	5 51	1 52	5 52	5 50	2 6
28	F.	Thos. F. Bayard died, 1898	☾	9 16	5 53	5 48	3 6	5 52	5 49	3 7	5 52	5 49	3 16
29	S.	Italy begins war on Turkey, 1911	☾	9 36	5 54	5 46	4 22	5 53	5 48	4 23	5 53	5 48	4 27
30	S.	17th Sunday after Trinity.	☾	9 56	5 55	5 45	5 32	5 54	5 47	5 32	5 53	5 46	5 34

WEATHER FORECAST FOR SEPTEMBER, 1917

1st to 5th, dry pleasant period. Fine, seasonable conditions East of the Mississippi River; extensive drouth in the West, being severe in Texas, Oklahoma, Kansas, Nebraska, Missouri, Wisconsin and Idaho. 6th to 9th, storm period. Local showers and severe thunder storms prevailing in drouth areas; loss of life and property by lightning, heavy rains and stormy conditions on the Gulf and Atlantic Coasts. 10th to 14th, hot wave over the country West of the Mississippi River. Hot winds will do damage to growing crops. Showers will occur on the Pacific Slope, while heavy rains will fall in many Sections East of the Mississippi River. 15th to 17th, thunder storms and stormy conditions with frequent showers from the Gulf to the Great Lakes; sand and dust storms in the West. 18th to 22nd, cool wave. Cool and fall-like at most points; local frosts in the Missouri River Valley, upper Mississippi Valley and Eastward to the Atlantic Coast; dry and smokey over the West. 23rd to 27th, threatening period. Unsettled and very blustery over the Western half of the country; general rains in Atlantic States. 28th to 30th, storm period. Dangerous gales will occur on the Great Lakes and along the Atlantic; general showers over the Gulf and Atlantic Slope. Temperature for September below normal in the North-west and above in the Southeast. Rain-fall much below average, except in Eastern Sections.

DEMAND COW BRAND SODA IN PACKAGES



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

- ☾ Last Quarter . . .
- ☾ New Moon
- ☾ First Quarter. . .
- ☾ Full Moon

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

D. H. M.		
7	5	30 Eve.
15	9	57 Eve.
23	9	54 Mor.
30	1	35 Mor.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

D. H. M.		
7	8	18 Eve.
15	9	45 Eve.
23	9	42 Mor.
30	1	23 Mor.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.		
7	4	54 Eve.
15	9	21 Eve.
23	9	18 Mor.
30	0	50 Mor.

Day of M th	Day of W th	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun	Sun	Sun	Moon	Sun	Sun	Moon	Sun	Sun	Moon	
				Fast	Rises	Sets	Rises	Rises	Sets	Rises	Sets	Rises	Sets	Rises
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	M.	First day of Tabernacle.	☾	10 16	5 56	5 43	6 5	5 55	5 45	6 7	5 54	5 45	6 15	
2	T.	Admiral Schley died, 1911	☾	10 35	5 57	5 41	6 41	5 56	5 43	6 44	5 54	5 44	6 51	
3	W.	Prince of Wales at Washington, 1860	☾	10 54	5 58	5 39	7 18	5 57	5 41	7 23	5 55	5 42	7 42	
4	T.	President Hayes born, 1822	☾	11 12	6 0	5 38	8 2	5 58	5 40	8 8	5 56	5 41	8 30	
5	F.	First bible printed, 1535	☾	11 30	6 1	5 36	8 52	6 0	5 39	8 59	5 57	5 40	9 20	
6	S.	Great storm in Nome, Alaska, 1913	☾	11 48	6 2	5 34	9 46	6 1	5 37	9 51	5 57	5 38	10 13	
7	S.	18th Sunday after Trinity.	☾	12 5	6 3	5 33	10 42	6 2	5 35	10 47	5 58	5 37	11 8	
8	M.	John Hancock died, 1793	☾	12 22	6 4	5 31	11 41	6 3	5 33	11 45	5 59	5 36	M'ng	
9	T.	Germans captured Antwerp, 1914	☾	12 39	6 5	5 29	M'ng	6 4	5 32	M'ng	6 0	5 35	0 3	
10	W.	U. S. Naval Academy opened, 1845	☾	12 55	6 6	5 27	0 42	6 5	5 30	0 44	6 0	5 33	0 59	
11	T.	Hurricane in Florida, 1909	☾	13 11	6 8	5 26	1 42	6 6	5 28	1 43	6 1	5 32	1 54	
12	F.	America discovered, 1492	☾	13 26	6 9	5 24	2 40	6 7	5 27	2 40	6 2	5 31	2 47	
13	S.	Germans occupy Lille, 1914	☾	13 40	6 10	5 23	3 39	6 8	5 25	3 33	6 3	5 30	3 42	
14	S.	19th Sunday after Trinity.	☾	13 54	6 11	5 21	4 39	6 9	5 24	4 38	6 3	5 29	4 37	
15	M.	Napoleon arrived at St. Helena, 1815	☾	14 8	6 12	5 19	5 39	6 10	5 22	5 37	6 4	5 27	5 32	
16	T.	Germans occupy Ostend, 1914	☾	14 21	6 14	5 18	Sets	6 11	5 21	Sets	6 5	5 26	Sets	
17	W.	Burgoyne surrendered, 1777	☾	14 33	6 15	5 16	5 58	6 12	5 19	6 3	6 6	5 25	6 19	
18	T.	Tidal Wave, Florida, 1906	☾	14 45	6 16	5 15	6 35	6 13	5 17	6 41	6 6	5 24	7 0	
19	F.	Battle of Cedar Creek, 1864	☾	14 56	6 17	5 13	7 29	6 14	5 16	7 23	6 7	5 23	7 47	
20	S.	U. S. fleet at Japan, 1905	☾	15 6	6 18	5 11	8 12	6 15	5 14	8 18	6 8	5 22	8 40	
21	S.	20th Sunday after Trinity.	☾	15 16	6 19	5 10	9 12	6 16	5 13	9 15	6 9	5 29	9 40	
22	M.	John Sherman died, 1900	☾	15 26	6 20	5 8	10 21	6 17	5 12	10 25	6 9	5 19	10 45	
23	T.	King of Slam died, 1910	☾	15 34	6 22	5 7	11 32	6 18	5 11	11 36	6 10	5 18	11 52	
24	W.	Daniel Webster died, 1852	☾	15 42	6 23	5 5	M'ng	6 19	5 9	M'ng	6 11	5 17	M'ng	
25	T.	Battle of Balaklava, 1854	☾	15 49	6 24	5 4	0 48	6 20	5 8	0 49	6 12	5 16	1 0	
26	F.	Prince Ito of Japan killed, 1909	☾	15 56	6 25	5 3	2 1	6 21	5 6	2 1	6 13	5 15	2 7	
27	S.	Theodore Roosevelt born, 1858	☾	16 2	6 26	5 1	3 15	6 22	5 5	3 14	6 13	5 14	3 15	
28	S.	21st Sunday after Trinity.	☾	16 7	6 28	5 0	4 29	6 23	5 3	4 27	6 14	5 13	4 24	
29	M.	Siege of Ladysmith begun, 1899	☾	16 11	6 29	4 58	5 43	6 24	5 2	5 40	6 15	5 12	5 32	
30	T.	Pres. Taft at New Orleans, 1909	☾	16 15	6 30	4 57	Rises	6 25	5 6	Rises	6 16	5 11	Rises	
31	W.	Halloween.	☾	16 18	6 31	4 56	5 55	6 27	4 59	5 59	6 17	5 11	6 19	

WEATHER FORECAST FOR OCTOBER, 1917

1st to 4th, pleasant period. Fine weather, with brilliant moonlight nights in Western, Central and Southern Sections; frosty nights North of parallel 40. 5th to 7th, unsettled period. Showery weather over Gulf States, the Northwest and Lake region. 8th to 11th, mild period. Fine dry, dusty weather covering the greater part of the country East of the Rocky Mountains; unsettled on Pacific Slope. 12th to 15th, storm wave. High winds and snow squalls in the Rocky Mountains and the Northwest; rains in the Mississippi and Ohio River Valleys; gales on the Great Lakes and North Atlantic Coast. 16th to 19th, mild and pleasant. 20th to 23rd, cool wave, with killing frosts as far South as the 37th parallel; dry, smoky weather in most all Sections. 24th to 26th, storm wave. A Western low barometer area will cause storms all along its Eastward march—thunder storms in its Southeastern quadrant and Northern storms in its Northern half, attended with cooler weather and possible sleet and snow. 27th to 31st, cool wave. Killing frosts will occur as far South as Northern Texas, Oklahoma and Tennessee; dry and smoky conditions very common. Mean temperature for the month will be slightly below normal. The rain-fall will be generally very light; drouth West of the Mississippi River—waters very low.

DEMAND COW BRAND SODA IN PACKAGES



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

- ☾ Last Quarter . . .
- ☾ New Moon
- ☾ First Quarter . . .
- ☾ Full Moon

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

D. H. M.
6 0 20 Eve.
14 1 45 Eve.
21 5 45 Eve.
28 1 57 Eve.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

D. H. M.
6 0 8 Eve.
14 1 33 Eve.
21 5 33 Eve.
28 1 45 Eve.

For Charleston,
Georgia, Alabama,
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.
6 11 44 Mor.
14 1 9 Eve.
21 5 9 Eve.
28 1 21 Eve.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.	Moon's C.	Sun Fast	Sun Rises	Sun Sets	Moon Rises	Sun Rises	Sun Sets	Moon Rises	Sun Rises	Sun Sets	Moon Rises
				M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	T.	All Saints' Day.	☾	16 20	6 33	4 54	6 42	6 28	4 58	6 48	6 18	5 9	7 9
2	F.	Jenny Lind died, 1887	☾	16 21	6 34	4 53	7 34	6 30	4 57	7 41	6 18	5 9	8 3
3	S.	Panama a Republic, 1903	☾	16 22	6 35	4 52	8 32	6 31	4 56	8 37	6 19	5 8	8 58
4	S.	22nd Sunday after Trinity.	☾	16 21	6 36	4 51	9 31	6 32	4 55	9 35	6 20	5 7	9 55
5	M.	Gen. B. F. Butler born, 1818	☾	16 20	6 38	4 49	10 30	6 33	4 54	10 34	6 21	5 6	10 51
6	T.	Benj. Harrison elected, 1888	☾	16 18	6 39	4 48	11 30	6 34	4 53	11 33	6 22	5 5	11 46
7	W.	Pensacola taken, 1814	☾	16 15	6 40	4 47	M'ng	6 35	4 52	M'ng	6 23	5 4	M'ng
8	T.	Theodore Roosevelt elected, 1904	☾	16 11	6 41	4 46	0 30	6 36	4 51	0 32	6 24	5 4	0 40
9	F.	Ex-Senator Carmack shot, 1908	☾	16 6	6 43	4 45	1 29	6 38	4 50	1 29	6 25	5 3	1 34
10	S.	R. G. Dun died, 1900	☾	16 1	6 44	4 44	2 27	6 40	4 49	2 27	6 26	5 2	2 28
11	S.	23rd Sunday after Trinity.	☾	15 54	6 45	4 43	3 27	6 41	4 48	3 26	6 27	5 1	3 23
12	M.	Paris Exposition closed, 1900	☾	15 47	6 46	4 42	4 30	6 42	4 47	4 28	6 27	5 1	4 21
13	T.	Great meteoric display, 1833	☾	15 39	6 48	4 41	5 33	6 43	4 46	5 30	6 28	5 0	5 19
14	W.	John A. Logan died, 1899	☾	15 30	6 49	4 40	Sets	6 44	4 45	Sets	6 29	5 0	Sets
15	T.	Brazil becomes a Republic 1889	☾	15 20	6 50	4 39	5 17	6 46	4 44	5 23	6 30	4 59	5 44
16	F.	N. Y. Even. Post first issued, 1801	☾	15 10	6 52	4 38	6 9	6 47	4 43	6 15	6 31	4 58	6 37
17	S.	Cape Cod discovered, 1492	☾	14 58	6 53	4 37	7 8	6 48	4 42	7 14	6 32	4 58	7 35
18	S.	24th Sunday after Trinity.	☾	14 46	6 54	4 36	8 14	6 49	4 41	8 19	6 33	4 58	8 39
19	M.	Josiah Quincy died, 1882	☾	14 33	6 55	4 35	9 24	6 50	4 40	9 28	6 34	4 57	9 44
20	T.	Seminole War begins, 1817	☾	14 19	6 56	4 35	10 35	6 51	4 39	10 38	6 35	4 57	10 51
21	W.	Edison's Phonograph inv., 1887	☾	14 4	6 58	4 34	11 47	6 52	4 38	11 48	6 36	4 56	11 56
22	T.	France becomes Empire, 1852	☾	13 48	6 59	4 33	M'ng	6 53	4 38	M'ng	6 37	4 56	M'ng
23	F.	Battle of Chattanooga, 1863	☾	13 32	7 0	4 33	1 0	6 54	4 37	1 0	6 38	4 56	1 3
24	S.	Strike Riots in Havana, 1902	☾	13 15	7 1	4 32	2 15	6 55	4 36	2 14	6 39	4 55	2 9
25	S.	25th Sunday after Trinity.	☾	12 57	7 2	4 32	3 23	6 56	4 36	3 21	6 39	4 55	3 15
26	M.	Battle of Modder River, 1899	☾	12 39	7 4	4 31	4 36	6 58	4 35	4 32	6 40	4 55	4 21
27	T.	Hoosac Tunnel opened, 1873	☾	12 26	7 5	4 31	5 47	6 59	4 35	5 42	6 41	4 55	5 28
28	W.	Washington Irving died, 1859	☾	12 0	7 6	4 30	Rises	7 0	4 35	Rises	6 42	4 54	Rises
29	T.	Thanksgiving Day.	☾	11 39	7 7	4 30	5 21	7 1	4 34	5 27	6 43	4 54	5 49
30	F.	Mark Twain born, 1835	☾	11 18	7 8	4 29	6 17	7 2	4 34	6 23	6 44	4 54	6 44

WEATHER FORECAST FOR NOVEMBER, 1917

1st to 4th, mild period over Central, Southern and Eastern Sections; heavy rains on Pacific Coast; showers in the Rocky Mountains and Northwest. 5th to 8th, storm period, under the influences of Mercury and Venus. Snow squalls will occur in the Rocky Mountains, the Missouri River Valley and the States of the Lakes; general rains, accompanied with thunder over Central, Southern and Eastern Sections; stormy over the Northwest, Lake region and New England. 9th to 11th, cold wave, bringing freezing temperature as far South as Northern Texas, Oklahoma and Tennessee. 12th to 14th, mild period. 15th to 18th, storm period. Much wind and bluster in States of the Northwest, the Lake region and along the Middle Atlantic and New England Coasts; showers from the Gulf to the Canada border. 19th to 21st, frost period. Severe frosts will occur in the South and freezing weather in Middle and Northern latitudes. 22nd to 26th, Indian Summer. Warm, smoky weather generally prevalent; drouthy conditions in Middle and Northern Sections. 27th to 30th, cold, wintry weather in the West and East; gales about the Lakes and Atlantic waters; showers in the South. Mean temperature for November will be near average. The rain-fall will be deficient at practically all points, except on Pacific Coast.

DEMAND COW BRAND SODA IN PACKAGES



USE COW
BRAND SODA
IN PACKAGES—
IT IS THE BEST

- ☾ Last Quarter . . .
- ☾ New Moon
- ☾ First Quarter. . .
- ☾ Full Moon

For Boston,
New England,
New York, Mich-
igan, Wisconsin,
Dakotas,
Oregon.

For New York
City, Connecticut,
Pennsylvania,
Ohio, Indiana,
Illinois, Nebraska
and N. California.

For Charleston,
Georgia, Alabama
Louisiana, Texas,
New Mexico,
Arizona and
So. California.

D. H. M.			
6	9	30	Mor.
14	4	33	Mor.
21	1	23	Mor.
28	5	8	Mor.

D. H. M.			
6	9	18	Mor.
14	4	21	Mor.
21	1	11	Mor.
28	4	56	Mor.

D. H. M.			
6	8	54	Mor.
14	3	57	Mor.
21	0	47	Mor.
28	4	32	Mor.

Day of M'th	Day of W'k	CHURCH DAYS AND HISTORICAL EVENTS.		Moon's C.	Sun Fast	Sun Rises	Sun Sets	Moon Rises	Sun Rises	Sun Sets	Moon Rises	Sun Rises	Sun Sets	Moon Rises
					M. S.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	S.	John Brown executed,	1859	☾	10 56	7 9	4 29	7 18	7 4	4 34	7 22	6 44	4 54	7 42
2	S.	1st Sunday in Advent.		☾	10 33	7 10	4 29	8 18	7 5	4 34	8 22	6 45	4 54	8 39
3	M.	Illinois admitted as a State,	1818	☾	10 9	7 11	4 28	9 19	7 6	4 34	9 22	6 46	4 54	9 36
4	T.	Mason & Dixon's Line est.,	1782	☾	9 46	7 12	4 28	10 19	7 7	4 34	10 20	6 47	4 54	10 31
5	W.	Martin Van Buren born,	1782	☾	9 21	7 13	4 28	11 17	7 8	4 33	11 18	6 48	4 54	11 24
6	T.	Jefferson Davis died,	1889	☾	8 56	7 14	4 28	M'ng	7 9	4 33	M'ng	6 49	4 54	M'ng
7	F.	Thos. B. Reed died,	1902	☾	8 30	7 15	4 28	0 15	7 10	4 33	0 15	6 49	4 54	0 18
8	S.	British Naval Victory,	1914	☾	8 4	7 16	4 28	1 14	7 11	4 33	1 13	6 50	4 54	1 11
9	S.	2nd Sunday in Advent.		☾	7 37	7 17	4 28	2 15	7 12	4 33	2 13	6 51	4 54	2 7
10	M.	Spanish-American Treaty,	1898	☾	7 10	7 18	4 28	3 18	7 13	4 33	3 14	6 52	4 54	3 5
11	T.	Gen. Garcia, Cuba, died,	1898	☾	6 43	7 19	4 28	4 22	7 14	4 33	4 14	6 53	4 55	4 4
12	W.	Geo. V. bec. Emp. of India,	1911	☾	6 15	7 20	4 28	5 27	7 15	4 33	5 22	6 54	4 55	5 4
13	T.	Mrs. U. S. Grant died,	1902	☾	5 46	7 20	4 28	6 32	7 16	4 33	6 26	6 54	4 55	6 6
14	F.	Eclipse of Sun, invisible.		☾	5 18	7 21	4 29	Sets	7 17	4 33	Sets	6 55	4 55	Sets
15	S.	Geo. Ronney born,	1734	☾	4 49	7 22	4 29	6 3	7 18	4 34	6 8	6 56	4 56	6 29
16	S.	3rd Sunday in Advent.		☾	4 19	7 23	4 29	7 14	7 18	4 34	7 18	6 56	4 56	7 36
17	M.	John S. Whittier born,	1807	☾	3 50	7 23	4 29	8 27	7 19	4 34	8 30	6 57	4 57	8 43
18	T.	Lyman Abbott, theologian, born,	1835	☾	3 21	7 24	4 29	9 39	7 19	4 34	9 41	6 57	4 57	9 49
19	W.	Ember Day.		☾	2 51	7 25	4 30	10 51	7 20	4 35	10 51	6 58	4 57	10 55
20	T.	South Carolina seceded,	1860	☾	2 21	7 25	4 30	M'ng	7 20	4 35	M'ng	6 58	4 58	M'ng
21	F.	Ember Day		☾	1 51	7 26	4 30	0 2	7 21	4 35	0 1	6 59	4 58	0 1
22	S.	Winter begins.		☾	1 21	7 26	4 31	1 13	7 21	4 35	1 12	6 59	4 59	1 7
23	S.	4th Sunday in Advent.		☾	0 51	7 27	4 31	2 23	7 22	4 36	2 21	6 59	4 59	2 12
24	M.	Peace between U. S. and Eng.,	1814	☾	0 21	7 27	4 32	3 34	7 22	4 36	3 30	7 0	5 0	3 16
25	T.	Christmas Day.		☾	Slow	7 28	4 32	4 40	7 22	4 36	4 35	7 0	5 0	4 18
26	W.	Steamer Virinius sunk,	1873	☾	0 37	7 28	4 33	5 45	7 23	4 37	5 39	7 1	5 1	5 19
27	T.	Charles Lamb, essayist, died,	1834	☾	1 7	7 29	4 34	6 44	7 23	4 38	6 38	7 1	5 1	6 18
28	F.	Total Eclipse of Moon 3:45 a.m. vis.		☾	1 36	7 29	4 35	Rises	7 23	4 38	Rises	7 1	5 2	Rises
29	S.	Andrew Johnson born,	1808	☾	2 6	7 29	4 35	6 3	7 23	4 39	6 8	7 2	5 3	6 27
30	S.	1st Sunday after Christmas.		☾	2 35	7 29	4 36	7 5	7 24	4 40	7 9	7 2	5 4	7 25
31	M.	West Virginia admitted,	1862	☾	3 3	7 29	4 37	8 5	7 24	4 41	8 8	7 3	5 4	8 20

WEATHER FORECAST FOR DECEMBER, 1917

1st to 4th, cold wave. This will be a wide extended cold wave for the West, Northwest and North, with freezing temperature as far South as Louisiana and Florida. Snow flurries will occur in many Sections on the 2nd and 3rd. 5th, fair and moderating. 6th to 9th, cloudy period. Dark, gloomy weather East of the Mississippi River; cold, squally weather in the Northwest, Missouri Valley and Lake region. 10th to 13th, mild, pleasant period. Fine weather for December over the Northwest, Central Mississippi and Ohio River Valleys; unsettled over Pacific Slope, Southwest and along the Gulf Coast. 14th to 17th, storm period. Unusually high winds and rain storms in the South; sleet and violent snow storms in Western, Central, Northern and Eastern States. 18th to 21st, cold wave. A moderate cold wave will cover most all Sections of the United States. Killing frosts reaching well into the Gulf States; rainy period on Pacific Coast. 22nd to 26th, mild, dry period. Mild, open weather in Western, Central, Southern and Eastern Sections. The days will be pleasant and sunny and nights cold and frosty. 27th to 31st, unsettled period, with rain and thunder in the Gulf States; severe cold wave with snow and blizzards in Middle and Northern latitudes. Temperature for the the month about normal. Precipitation very light.

DEMAND COW BRAND SODA IN PACKAGES

LEGAL HOLIDAYS FOR 1917

January 1—New Years Day; in District of Columbia and all states and territories but Massachusetts.

January 8—Anniversary of the Battle of New Orleans; in Louisiana.

January 19—Lee's Birthday; in Florida, Georgia, North Carolina, South Carolina, Virginia, Alabama and Arkansas.

February 12—Lincoln's Birthday; in Connecticut, Colorado, Delaware, Illinois, Iowa, Kansas, Michigan, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, North Dakota, Pennsylvania, South Dakota, Utah, Washington, West Virginia and Wyoming.

February 12—Georgia Day; in Georgia.

February 22—Washington's Birthday; in all states and territories and Dist. of Columbia.

March 2—Anniversary of Texan Independence; in Texas.

March 22—Emancipation Day; in Porto Rico.

April 6—Good Friday; in Alabama, Louisiana; Kentucky, Minnesota, New Jersey, Pennsylvania and Tennessee.

April 12—Halifax Independence Resolution; in North Carolina.

April 13—Thos. Jefferson's Birthday; in Alabama.

April 19—Patriot's Day; in Massachusetts and Maine.

April 21—Anniversary of the Battle of San Jacinto; in Texas.

April 26—Confederate Memorial Day; in Alabama, Georgia, Florida and Mississippi.

May 10—Confederate Memorial Day; in North Carolina and South Carolina.

May 12—Confederate Memorial Day; in Tennessee.

May 20—Anniversary of Signing of Mecklenburg Declaration of Independence; in North Carolina.

May 30—Decoration Day; in District of Columbia and all states and territories except Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Texas.

May 30—Confederate Memorial Day; in Virginia.

June 3—Jefferson Davis' Birthday; in Alabama, Florida, Georgia, Louisiana, Mississippi, Tennessee, Texas and South Carolina.

June 11—Kamehameha Day; in Hawaii.

June 15—Pioneers' Day; in Idaho.

July 4—Independence Day; in all states and territories and the Dist. of Columbia.

July 10—Admission Day; in Wyoming.

July 24—Pioneers' Day; in Utah.

July 25—Landing American Troops; in Porto Rico.

August 1—Colorado Day; in Colorado.

August 16—Bennington Battle Day; in Vermont.

September 2—John Howard Day; in Nebraska, in penal and reformatory institutions in memory of author of prison reform in United States.

September 3—Labor Day; in all states and territories; in Wyoming by proclamation of the Governor.

September 9—Admission Day; in California.

September 12—Old Defenders' Day; in Maryland.

October 12—Columbus Day; in Alabama, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Kansas, Kentucky, Maryland, Michigan, Montana, Maine, Missouri, Massachusetts, New Jersey, New York, New Mexico, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Vermont, West Virginia and Washington.

October 31—Admission Day; in Nevada.

November 1—All Saints' Day; in Louisiana.

November 6—General Election Day; in such states holding elections.

November 29—Thanksgiving Day; observed throughout the United States, though not a statutory holiday in some.

December 25—Christmas Day; all states, territories and the Dist. of Columbia.

Arbor Day is a legal holiday in North Dakota, Illinois, Minnesota, Maine and Wyoming, date being set by respective Governors; in Nebraska, April 22; in Montana, third Tuesday in April; in Arizona, first Monday in February; in Utah, April 15; in Rhode Island, second Friday in May; in Iowa, Friday after May 1; in Florida, first Friday in February; in Georgia, first Friday in December.

Thursday or Fair Week; in South Carolina.

Every Saturday afternoon is a legal holiday in New York, New Jersey, Pennsylvania, Maryland, North Carolina, Indiana, Michigan, Ohio, California, Tennessee, Virginia, and the District of Columbia; in Louisiana and Missouri in cities over 100,000; in Illinois in cities over 200,000; in New Castle County, Delaware, and in Charleston and Richland Counties, South Carolina.

New Years, February 22, May 30, July 4, Labor Day, Thanksgiving Day and Christmas are legal holidays by act of Congress applying to all governmental executive departments only, but are not necessarily observed by Congress itself.

DEMAND COW BRAND SODA IN PACKAGES

HOW TO CUT DOWN THE COST OF LIVING IS THE QUESTION OF THE DAY.

Use COW BRAND SODA IS THE BEST ANSWER.

YOU KNOW THAT OF ALL LEAVENING AGENTS SODA IS THE CHEAPEST IN FIRST COST AND MOST ECONOMICAL IN USE. YOU SHOULD KNOW—TESTS PROVE IT—THAT OF ALL SODAS, COW BRAND SODA IN PACKAGES IS UNIFORMLY PUREST AND SO GOES FARTHEST—(SEE PAGE 17.) AS AN EXAMPLE OF ITS ECONOMY: COW BRAND SODA COMBINES WITH SOUR MILK, WHICH MIGHT OTHERWISE BE THROWN AWAY, TO TAKE THE PLACE OF EXPENSIVE BAKING POWDERS AND SWEET MILK IN CAKES, PUDDINGS AND BREADS. BUT THE USE OF COW BRAND SODA IN COOKING IS ONLY THE BEGINNING OF ITS ECONOMIES. THE COOK BOOK, SENT FREE, WILL TELL YOU ABOUT MANY OF ITS HOUSEHOLD USES. FOLLOW DIRECTIONS AND YOU WILL CUT DOWN YOUR HOUSEKEEPING BUDGET MATERIALLY.

MONEY-SAVING IS IMPORTANT. BUT COW BRAND SODA IN YOUR HOME WILL SAVE YOU OTHER VALUABLE THINGS BESIDE MONEY.

YOUR TIME. NO NEED OF KEEPING UP A HOT FIRE FOR HOURS IF YOU ADD A PINCH OF COW BRAND SODA TO YOUR VEGETABLES IN BOILING. IT RIVALS THE FIRELESS COOKER FOR VEGETABLES.

YOUR HEALTH. NO EXCUSE FOR UNSANITARY FOOD-RECEPTACLES; NO REASON FOR ILLNESS FROM SOURING VIANDS WHEN COW BRAND SODA SWEETENS THEM.

USE COW BRAND SODA FREELY IN YOUR HOME AND ON YOUR FARM IF YOU WOULD PRACTICE TRUE ECONOMY.

IT IS IMPORTANT TO LOOK FOR THE COW TRADE MARK—THE PROOF OF PURITY AND STRENGTH.

COW BRAND BICARBONATE OF SODA

IS THE PUREST AND BEST BICARBONATE OF SODA MANUFACTURED

BUT DO YOU KNOW?

that in addition to its known superiority for all cooking purposes, it is most excellent for the following uses:

Dyspepsia or Heartburn—A quarter of a teaspoonful of **COW BRAND BICARBONATE OF SODA** dissolved in a tumbler of water, and drunk three or four times a day, will be found very beneficial.

Colds—A half teaspoonful of **COW BRAND BICARBONATE OF SODA** in a glass of water, and repeated if necessary in one or two hours, will often ward off a cold in its early stages.

Cow Brand Soda in the Bath—Give it a fair trial and note its effect.

A most delightful bath may be taken by filling the bath tub with water as hot as can be comfortably borne and then thoroughly dissolving in it from one-half to one pound of **COW BRAND BICARBONATE OF SODA**. It makes the water pleasant. It is perfectly harmless and there is no danger of using too much. In fact the more used the more agreeable will be the effect.

A SODA BATH will be found beneficial for **Rheumatism, Lumbago** and ills of like nature.

SILVER EASILY AND SAFELY CLEANED AND POLISHED.

Fill a tin pan with sufficient hot water to cover the tarnished silver and add one tablespoonful of **COW BRAND BAKING SODA (BICARBONATE OF SODA)** and one tablespoonful of common table salt for each quart of water used. *Stir until dissolved.* Then put into the solution a piece of sheet zinc about one-half or two-thirds the size of the bottom of the pan and place the silver articles in the solution so that they will be in contact with both the zinc and the tin pan and allow them to remain a few minutes. Remove the silver, rinse with cold water and wipe with a soft cloth. *The silver will be bright and clean.*

Embossing should be brushed with a soft brush covered with moistened **COW BRAND BAKING SODA** to remove the tarnish from the crevices. Repeat the above treatment if the silver is badly tarnished and not cleaned by the first application. The piece of zinc and the pan should be kept bright and clean. *This process of cleaning does not in any manner injure the silver.*

DEMAND COW BRAND SODA IN PACKAGES

"COW BRAND"

CHURCH & DWIGHT CO.'S SODA OR SALERATUS.

BEST IN THE WORLD.

Housekeepers well know how important it is to thoroughly understand the art of making good bread and other similar articles of cookery. In order to do this it is essential, above everything else, to procure good materials, especially flour and good Baking Soda or Saleratus.

The value of Soda or Saleratus depends entirely upon the amount of carbonic acid gas it contains, as that constitutes its sole raising property. It is therefore apparent that the particular brand of Soda or Saleratus which produces, when used for making bread, the largest quantity of carbonic acid gas, is the most valuable to the consumer. The COW BRAND SODA contains UNIFORMLY OVER 52 PER CENT. OF CARBONIC ACID GAS, OR OVER 99 PER CENT. OF PURE SODA OR SALERATUS, every pound of which, shipped from the extensive chemical works of the manufacturers, is tested, and nothing allowed to be delivered falling short of this standard. CHURCH & DWIGHT CO.'S COW BRAND SODA OR SALERATUS is almost absolutely and chemically pure—the minute fraction of a hundredth part lacking in that respect being of trivial importance.

Consumers can, therefore, rely upon invariably obtaining good results in cooking if they insist upon using only the COW BRAND OF SODA OR SALERATUS in their households. It is manufactured of uniform quality, because of the purity of its materials, and thoroughly charged with carbonic acid gas, besides being always packed full weight.

BAKING POWDER.

The large increase in the use of baking powder of late years has induced unscrupulous persons to enter into the manufacture of cheap and inferior baking powders, producing deleterious effects on the health of families using them. One eminent chemist, after analyzing nearly fifty different brands, determined that fifty per cent. were grossly adulterated. The sole value in baking powder is the rising property, or carbonic acid gas, which is contained in the Soda or Saleratus alone. The safest and most economical plan is to use only CHURCH & DWIGHT CO.'S COW BRAND SODA OR SALERATUS, or, if baking powders are preferred, housekeepers can make the best quality at home.

HOUSEKEEPERS.

Do not use too much. The superior quality and strength of COW BRAND SODA OR SALERATUS does not require that so large a quantity be used as does cheap bulk Soda.

Insist on having the COW BRAND SODA OR SALERATUS in packages, and you will have the BEST.

WHY MANURE MAKES PLANTS GROW FASTER.

There is a wonderful and complicated process which takes place in plants as well as animals, which we call "Growing." Growth depends upon a sufficient quantity of proper kinds of food being consumed by the living thing. We all know that if our gardens are neglected or if children are not properly fed, they grow up weak and sickly. This condition is overcome or prevented by administering plenty of food and fresh air. We find that every kind of living tissue has some particular food which makes it grow better and more perfectly than any other food. What we usually call "Manure" is more or less decayed stuff—bodies of other plants or animals that have died. This is just the food which contains the most nutritious qualities for plants and crops. Thus, when the farmer wants his crops or plants to grow as quickly as possible and to be large and wholesome, he gives them the kind of food best suited for this purpose, that is, Manure. Science today shows us that many substances can be prepared artificially which assist in the growth of plants and crops in barren land, where they could not have been grown before.

DEMAND COW BRAND SODA IN PACKAGES

THE MOON

Of all the secondary planets the earth's satellite is by far the most interesting and important. The moon completes her circuit around the earth in a period whose mean or average length of time is 27 days 7 hours 43.2 minutes; but in consequence of her motion in common with the earth around the sun, the mean duration of the lunar month, that is, the time from new moon to new moon, is 29 days 12 hours 44.05 minutes, which is called the moon's synodical period. If the earth were motionless in space the moon's orbit would be nearly an ellipse, having the earth in one of the foci; hence her distance from the earth varies during the course of a lunar month. Her mean distance from the earth is 238,850 miles. Her maximum distance, however, may reach 252,830 miles, and the least distance to which she can approach the earth is 221,520 miles. Her diameter is 2,162 miles, and if we deduct from her distance from the earth the sum of the two radii of the earth and moon, viz., 3,962 and 1,081 miles, respectively, we shall have for the nearest approach of the surfaces of the two bodies 216,477 miles. Her orbit is a very intricate one, because the earth in moving around the sun carries the moon along with it; hence the latter is sometimes within and sometimes without the earth's orbit. Its form is that of a serpentine curve, always concave toward the sun, and inclined to the plane of the earth's orbit at an angle of $5^{\circ}9'$, in consequence of which our satellite appears sometimes above and sometimes below the plane of the earth's orbit, through which she passes twice in a revolution. These points or positions are called nodes, and no two consecutive nodes occupy positions diametrically opposite on the lunar orbit. The nodes have a retrograde motion, which causes them to make an entire revolution in 18 years, 218 days, 21 hours, 22 minutes and 46 seconds. This motion was well known to the ancients, who called it the Saros, and was made use of by them in roughly predicting eclipses.

The moon always presents the same face to us, as is evident from the permanency of the various markings on its surface. This circumstance proves that with respect to the earth she revolves on an axis, and the time of rotation is exactly equal to the time of revolution around the earth, viz., 27.32166 days. The moon's axis is not perpendicular to the plane of her orbit, but deviates therefrom by an angle of about $6^{\circ}41'$. In consequence of this fact, and of the inclination of the lunar orbit to that of the ecliptic, the poles of the moon lean alternately to and from the earth. When the north pole leans toward the earth we see somewhat more of the region surrounding it, and somewhat less when it leans the contrary way. This displacement is known by the name of libration in latitude.

The moon's motion on her axis is uniform, but her angular velocity in her orbit is subject to slight variations by reason of the form of her orbit; hence it happens that we sometimes see a little more of the eastern or western edge at one time than at another. This phenomenon is known as libration in longitude.

The moon's surface contains about 14,685,000 square miles, or nearly four times the area of Europe. Her volume is 1.49 and her mass 1.81 that of the earth, and hence her density about 3.5 that of the earth, or about 3.25 that of water. At the lunar surface gravity is only 3.20 of what it is at the earth, and therefore a body which weighs 20 pounds here would weigh only 3 pounds there.

The centre of gravity of the earth and moon, or the point about which they both actually revolve in their course around the sun, lies within the earth; it is 1,063 miles below the surface.

The attractive force of the moon, acting on the water of our oceans is mainly instrumental in raising them into protuberances or tides in such a manner as to give the total mass a spheroidal figure whose principal axis would continually coincide with the line joining the centres of the earth and moon, but in consequence of the resistance which this movement of the water encounters from continents and islands, as well as from the liquid molecules themselves, the tidal wave can never arrive at any place until about one hour after the moon has crossed the meridian of the place.

The moon has no atmosphere and no water. The suddenness with which stars are occulted by the moon is regarded as a conclusive proof that a lunar atmosphere does not exist, and the spectroscope furnishes negative evidence of the same character.

In remote ages the lunar surface was the theatre of violent volcanic action, being elevated into cones and ridges exceeding 20,000 feet high, and at other places rent into furrows or depressions of corresponding depth. The lunar volcanoes are now extinct. A profound silence reigns over the desolate and rugged surface. It is a dead world, utterly unfit to support animal or vegetable life.

DEMAND COW BRAND SODA IN PACKAGES

TABLES OF MEASURE.

Corn in a Crib, Hay in a Mow, Etc.

The cubical contents of a crib in inches divided by 2150 equals number of bushels of corn on ear, contained in crib. If the corn shells, 50% of it will equal same number of bushels as the cubical contents of crib in feet divided by $2\frac{1}{2}$.

The exact amount of corn on ear necessary to make one bushel shelled corn will vary according to variety, shape and size of ear, etc.

To find the number of bushels of apples, potatoes, etc., in a bin, multiply the length, breadth and thickness together, and this product by 8, and point off one figure in the product for decimals.

To find the amount of hay in a mow, allow 512 cub. feet for a ton, and it will come out very generally correct.

Knowing the weight, to find the number of gallons in a barrel or other receptacle, subtract the weight of the container from the gross weight in pounds and divide the remainder by 8.355 (the weight in pounds of 1 U.S. gallon of water) multiplied by the specific gravity, which is the relative weight of a substance compared with an equal bulk of distilled water.

MEASURES OF ACRE PLOT.

($16\frac{1}{2}$ feet=1 rod)

3 x 53 $1\frac{1}{3}$ rods	8 x 20 rods	60 x 726 feet	200 x 217.8 feet
4 x 40 rods	9 x 17 $7\frac{7}{9}$ rods	100 x 435.6 feet	220 x 198 feet
5 x 32 rods	10 x 16 rods	110 x 396 feet	240 x 181 $\frac{1}{2}$ feet
6 x 26 $2\frac{2}{3}$ rods	11 x 14 $6\frac{11}{11}$ rods	120 x 363 feet	440 x 99 feet
7 x 22 $6\frac{7}{7}$ rods	12 x 13 $1\frac{1}{3}$ rods		

WEIGHTS OF PRODUCE.

Apples, dried	26 lbs. to bushel	Malt	38 lbs. to bushel
Barley	48 lbs. to bushel	Oats	32 lbs. to bushel
Beans	60 lbs. to bushel	Onions	57 lbs. to bushel
Bran	20 lbs. to bushel	Peaches (dr'd)	33 lbs. to bushel
Buckwheat	48 lbs. to bushel	Peas	60 lbs. to bushel
Coal	80 lbs. to bushel	Potatoes (w't)	60 lbs. to bushel
Corn (shelled)	56 lbs. to bushel	Potatoes (sw't)	55 lbs. to bushel
Corn (in ear)	70 lbs. to bushel	Rye	56 lbs. to bushel
Corn Meal	48 lbs. to bushel	Salt (fine)	55 lbs. to bushel
Flax Seed	56 lbs. to bushel	Salt (coarse)	50 lbs. to bushel
Hair, Plastering	8 lbs. to bushel	Turnips	55 lbs. to bushel
Hemp Seed	44 lbs. to bushel	Wheat	60 lbs. to bushel
Lime (unslacked)	30 lbs. to bushel		

The above are minimum weights of produce according to the laws of the United States.

IT'S CONVENIENT TO KNOW THAT

Doubling the diameter of a pipe increases its capacity four times.

A cubic foot of water contains approximately $7\frac{1}{2}$ gallons, 1728 cubic inches, and weighs $62\frac{1}{2}$ pounds.

The area of a triangle is found by multiplying the base by half the perpendicular height.

The area of a circle is found by multiplying the square of the diameter by .7854.

The diameter of a circle is found by multiplying the circumference by .31831.

The circumference of a circle is found by multiplying the diameter by 3.1416.

THE EARTH'S ATMOSPHERE.

The earth's sensible atmosphere is generally supposed to extend some forty miles in height, probably further, but becoming at only a few miles from the surface of too great a tenuity to support life. The condition and motions of this aerial ocean play a most important part in the determination of climate, modifying, by absorbing, the otherwise intense heat of the sun, and, when laden with clouds, hindering the earth from radiating its acquired heat into space.

SCOPE OF VISION AT SEA.

The distance at which objects are visible at sea on clear days varies, and is, in miles, about as stated below, at the elevations mentioned:

ELEV. Ft.	MILES	ELEV. Ft.	MILES	ELEV. Ft.	MILES
5	2.96	100	13.23	500	29.58
10	4.2	200	18.72	1,000	41.7
20	5.92	300	22.91	5,000	93.3
50	9.35				

DEMAND COW BRAND SODA IN PACKAGES

IN EMERGENCY.

CINDERS IN THE EYE. Roll soft paper up like a lamplighter, and wet the tip to remove, or use a medicine dropper to draw it out. A remedy which is found very good is given as follows: **DO NOT RUB THE EYE**; but instead close both eyes and gently massage the eye which has not been effected. This causes a water to form in the eye, which carries the cinder to the corner, where it can be very easily removed.

DROWNING. 1. Loosen clothing, if any. 2. Empty lungs of water by laying body on its stomach, and lifting it by the middle so that the head hangs down. Jerk the body a few times. 3. Pull and fasten tongue forward, using handkerchief, or pin with string, if necessary. 4. Imitate motion of respiration by alternately compressing and expanding the lower ribs, about twenty times a minute. Alternately raising and lowering the arms from the sides up above the head will stimulate the action of the lungs. Let it be done gently but persistently. 5. Apply warmth and friction to extremities. 6. By holding tongue forward, closing the nostrils, and pressing the "Adam's apple" back (so as to close entrance to stomach), direct inflation may be tried. Take a deep breath and breathe it forcibly into the mouth of patient, compress the chest to expel the air, and repeat the operation. 7. **DON'T GIVE UP.** People have been saved after **HOURS** of patient, vigorous effort. When breathing begins, get patient into a warm bed, give **WARM** drinks, or spirits in teaspoonfuls, fresh air, and quiet.

FAINTING. Place flat on back; allow fresh air, and sprinkle with water. Place head lower than rest of body.

FIRE FROM KEROSENE. Don't use water, it will spread the flames. Dirt or sand is the best extinguisher, or smother with woolen rug, tablecloth or carpet.

TO EXTINGUISH A FIRE promptly, a large package of **Cow Brand Baking Soda** should be scattered at the base of the flames. The heat from the fire releases carbonic acid gas, which kills the flame.

FIRE IN ONE'S CLOTHING. Don't run--especially not downstairs or out-of-doors. Roll on carpet, or wrap in woolen rug or blanket. Keep the head down, so as not to inhale flame.

SUNSTROKE. Loosen clothing. Get patient into shade and apply ice-cold water to head. Keep head in elevated position.

TO STOP NOSE BLEED.

For slight bleeding of the nose sniff cold water, apply a handkerchief dipped in cold water to the root of the nose, and sit in a chair with the head back and place something cold such as a key on the back of the neck. Never bend down over a basin. If the bleeding is constant, apply ice to the back of the neck; lie flat and plug the nostril with a piece of wet rag until the doctor comes. The hands should be held above the head; the collar loosened and fresh air breathed. Hot water should be applied to the feet.

DEMAND COW BRAND SODA IN PACKAGES

UNITED STATES POSTAL SERVICE.

DOMESTIC RATES OF POSTAGE.

Applicable within the U. S. and between possessions of the U. S. including Porto Rico, Hawaii, Philippines, Guam, Tutuila and neighboring islands in the possession of the U. S., and the "Canal Zone" (the territory purchased from the Republic of Panama, embracing both the mainland and the islands of Perico, Naos, Culebra and Flamenco); and to the matter sent to Canada, Cuba, Mexico, Republic of Panama and the U. S. postal agency at Shanghai, China, and to officers or members of the crews of vessels of war of the U. S.

First Class.—Includes wholly or partly written matter, sealed or unsealed (letters, U. S. postal cards, postcards manufactured by private persons), and matter closed against inspection. Type-writing and carbon and letter-press copies thereof are regarded as written matter.

Rate: Two cents for one ounce or fraction; U. S. postals, one cent each; postcards, one cent each. Limit of weight, four pounds.

Second Class.—Includes unsealed newspapers and other periodical publications bearing notice of entry as second class matter, when mailed by the public.

Rate: One cent for each four ounces or fraction; full prepayment required. No limit of weight.

Third Class.—Includes unsealed books, newspapers and periodicals not admitted to the second class, circulars, miscellaneous printed matter on paper not having the nature of personal correspondence, proof-sheets corrected proof-sheets, and manuscript copy accompanying same, and matter in point-print or raised characters used by the blind. In this class are *not* included articles bearing print such as envelopes, letters and bill-heads, wrapping paper and all substances other than paper.

Rate: One cent for each two ounces or fraction. Full prepayment required. Limit of weight, four pounds, except it be a single book.

Fourth Class.—All matter formerly embraced in this class, including farm and factory products is regulated by the amendments to the Post Office Appropriation Bill, operative since January 1, 1913, and August 15, 1913. The rates of postage depend upon weight and distance from mailing point, and it is provided that parcels shall not exceed 72 inches in length and girth combined, nor be in form or kind likely to injure any person handling them, or other mail matter or mail equipment, and not of a character perishable within a period reasonably required for transportation and delivery.

For purposes of payment of postage this country, aside from the Philippines, is divided into zones, diagrams of which are posted for reference in every United States Post Office. Parcels weighing 4 ounces or less are mailable at the rate of 1 cent for each ounce or fraction thereof, regardless of distance. Parcels weighing more than 4 ounces and not exceeding 11 pounds, excepting those parcels intended for local delivery or delivery within the first and second zones, which must not weigh more than 20 pounds, are mailable at the pound and distance rates shown in the hereinafter table, a fraction of a pound being considered a full pound. Parcels intended for local delivery are mailable at the rate of 5 cents for the first pound and 1 cent for each additional 2 pounds or fraction thereof. Parcels intended for delivery within the first and second zones are mailable at the rate of 5 cents for the first pound and 1 cent for each additional pound or fraction thereof.

Zone	Limits in miles from sender	Cost per 1st lb.	Cost per excess lb. or fraction
1	50	5 cents	1 cent
2	150	5 "	1 "
3	300	7 "	5 cents
4	600	8 "	6 "
5	1000	9 "	7 "
6	1400	10 "	9 "
7	1800	11 "	10 "
8	Exceeding 1800	12 "	12 "

A mailable parcel on which the postage is fully prepaid may be insured against loss in an amount equivalent to its actual value, but not to exceed \$25, on payment of a fee of 5 cents, and in an amount equivalent to its actual value of \$25, but not to exceed \$50, on payment of a fee of 10 cents in stamps.

The sender of a mailable parcel on which the postage is fully prepaid may have the price of the article and the charges thereon collected from the addressee on payment of a fee of 10 cents, provided the amount to be collected does not exceed \$100. Such a parcel will be insured against loss without additional charge in an amount equivalent to its actual value, but not to exceed \$50.

DEMAND COW BRAND SODA IN PACKAGES

UNITED STATES POSTAL SERVICE—(CONTINUED).

THE MONEY ORDER SYSTEM

provides a cheap, safe and convenient means of transmitting money. Domestic Postal Money Orders are payable in the U. S. and her island possessions, which includes Hawaii, Porto Rico, the "Canal Zone" on the Isthmus of Panama, Guam, the Philippines, Tutuila, Samoa; at the U. S. postal agency at Shanghai, in the Bahamas, Bermuda, British Guiana, British Honduras, Canada, Cuba, Newfoundland and Antigua, Barbadoes, Dominica, Grenada, Jamaica, Montserrat, Nevis, St. Kitts, St. Lucia, St. Vincent and the Virgin Islands.

Fees: From three cents for sums up to \$2.50 to thirty cents for sums up to \$100.

Special Delivery. A special delivery stamp, or 10 cents worth of stamps in addition to the lawful postage, secures the immediate delivery of any piece of mail matter at any U. S. post office within the carrier limits of the city delivery office and within a mile limit of any other post office. Rural letter-carriers are required to deliver special delivery mail at the residences of patrons of their routes if they live within a half mile of the routes. When ordinary stamps are used to obtain immediate delivery of mail, the words "Special Delivery" must be printed or written on the envelope or covering.

If special delivery matter fails of delivery because there is no person at the place of address to receive it, the matter is returned to the post office and delivered in the ordinary mail.

A special delivery stamp does not give a piece of mail any other security than that given to ordinary mail matter.

The **Registry System** provides for special care and correct delivery. Without extra cost, every registered letter or parcel prepaid at the letter rate and mailed at and addressed to any U. S. post office, is insured against loss for its value up to fifty dollars. Registration fee, ten cents in addition to the lawful postage.

A letter or parcel to be registered must bear in serviceable stamps the necessary postage and registry fee, must be legibly and correctly addressed, and bear upon the envelope or wrapper the name and address of the sender; it should be handed to the post-master, clerk or carrier who will give a regular receipt to the sender. Letters or parcels for registry should not be placed in street letter-boxes or in the ordinary mail-drops at the post office.

POSTAL REGULATIONS.

UNMAILABLE MATTER.

The following matter is inadmissible to the mails: that which is illegibly or insufficiently addressed, not prepaid and of the second, third and fourth class; excessive in weight; harmful in its matter, as poisons, explosives or inflammables, matches, animals, reptiles, fruit and vegetables liable to decay, or exhaling a bad odor; spirituous or malt liquors, cocaine and its derivatives; liquids liable to explosion, spontaneous combustion, or ignition by shock (kerosene, oil, etc.); obscene matter, articles intended for immoral purposes, libelous, threatening or defamatory language exposed so that it may be read; matter concerning any lottery or other enterprise of chance, or schemes to obtain money or property under false pretenses; postcards bearing particles of glass, mica, sand, tinsel, etc., unless tightly sealed in envelopes.

Complaints and Lost Mail Matter. All complaints and enquiries relative to lost mail matter of every description should be addressed to the post-master.

Return of Mail Matter. The only domestic mail matter which, when undeliverable is returnable to the sender without additional postage is letters and other first class matter prepaid two cents; official matter mailed under penalty envelopes or frank, and double postcards, but not single postcards nor postals. First class matter must remain in the post office for delivery three days; it will then be returned to the sender at the end of the time indicated if the envelope is endorsed "After—days, return to" etc.; otherwise it will be returned at the end of thirty days.

Second class matter is returnable only upon new prepayment at the rate of one cent for each four ounces or fraction; third and fourth class matter at the rate chargeable when originally mailed.

FOREIGN RATES OF POSTAGE.

Letters for Newfoundland, England, Ireland, Scotland and Wales (and for Germany by steamers sailing for Germany direct), per ounce or fraction, two cents.

Rates applicable to countries other than those mentioned:

Letters for one ounce or fraction, five cents; for each additional ounce or fraction, three cents.

Single postals and post cards bearing written or typewritten communications, two cents.

Double postals, four cents.

DEMAND COW BRAND SODA IN PACKAGES

CLEAN MILK.

Cows should be kept curried, and the udders wiped before milking with a cloth wrung out of a solution of **COW BRAND SODA**; small mouthed pails are best.

Cows should not be fed before milking, for the dust from the fodder hangs in the air for a long time afterward. The ceiling should be free from cobwebs and dirt, and the barnyard kept in such condition that the cow need not wade through filth.

The condition of the containers demand ceaseless vigilance. When they have been emptied of milk and rinsed, let them stand for a while in a mild solution of **COW BRAND SODA**. The Soda neutralizes the acidity of the milk that remains on the sides and in the seams, and dissolves the fatty deposits so that the vessel is readily cleansed. So valuable is Soda for the purpose of washing out milk receptacles that the New York City Board of Health advised its use in a circular issued for the instruction of the public, and for its protection from the nuisance arising from unsanitary milk bottles. After scalding, dry thoroughly and set in the sun if possible. The sun is a great germicide.

If cheese-cloth is used for straining, rinse after using and bring to a boil in water containing a half-spoonful of **COW BRAND SODA**. And remember, in general, that while it is hard to keep bacteria from milk with the best of aids and care, it is almost impossible without the best of **SODA—COW BRAND**.

TO SOFTEN WATER.

When softness is lacking, the addition of a little Bicarbonate of Soda—**COW BRAND SODA** is best—will make the hardest water delightful to the skin, and vastly more efficacious for all cleansing purposes. Water thus softened has a very practical advantage in requiring much less soap to produce a suds and to loosen dirt. It does away, beside, with the curdy, tenacious streak which marks the water-line when naturally hard or unsoftened water is used.

SHINGLES, SIDING, LATHS AND MORTAR.

1000 *shingles*, exposed four inches will cover 100 square feet of surface; five pounds of *shingle nails*, will fasten them on.

One-fifth more *siding* and *flooring* is needed than the number of square feet surface to be covered, because of the lap in the siding and the matching in the flooring.

1000 *laths* will cover 70 square yards of surface; 11 pounds of *lath nails* will nail them on.

8 bushels of good lime, 16 bushels sand and 1 bushel hair will make enough *mortar* to plaster 100 square yards.

DEMAND COW BRAND SODA IN PACKAGES

HEIGHT AND WEIGHT OF MEN.

Table of Average Height and Weight of Males, Based on Analysis of 74,162 Accepted Applicants for Life Insurance as Reported to the Association of Life Insurance Medical Directors.

Height	Age 15-24	Age 25-29	Age 30-34	Age 35-39	Age 40-44	Age 45-49	Age 50-54	Age 55-59	Age 60-64	Age 65-69
5 feet	120	125	128	131	133	134	134	134	131	
5 feet 1 in.	122	126	129	131	134	136	136	136	134	
5 feet 2 in.	124	128	131	133	136	138	138	138	137	
5 feet 3 in.	127	131	134	136	139	141	141	141	140	140
5 feet 4 in.	131	135	138	140	143	144	145	145	144	143
5 feet 5 in.	134	138	141	143	146	147	149	149	148	147
5 feet 6 in.	138	142	145	147	150	151	153	153	153	151
5 feet 7 in.	142	147	150	152	155	156	158	158	158	156
5 feet 8 in.	146	151	154	157	160	161	163	163	163	162
5 feet 9 in.	150	155	159	162	165	166	167	168	168	168
5 feet 10 in.	154	159	164	167	170	171	172	173	174	174
5 feet 11 in.	159	164	169	173	175	177	177	178	180	180
6 feet	165	170	175	179	180	183	182	183	185	185
6 feet 1 in.	170	177	181	185	186	189	188	189	189	189
6 feet 2 in.	176	184	188	192	194	196	194	194	192	192
6 feet 3 in.	181	190	195	200	203	204	201	198		

A Height and Weight Table compiled by a Committee of the Medical Section of the National Fraternal Congress, 1900, which is the analysis of 133,940 applications of selected risks in a few instances differed very slightly from the above.

HEIGHT AND WEIGHT OF WOMEN.

The following table gives the relative height and weight of women, all ages. The weight of ordinary clothing, however, is included.

Height	Average	Min-imum	Max-imum	Height	Average	Min-imum	Max-imum
5 ft.	115	98	132	5 ft. 7 in.	145	123	167
5 ft. 1 in.	120	102	138	5 ft. 8 in.	148	126	170
5 ft. 2 in.	125	106	144	5 ft. 9 in.	155	131	179
5 ft. 3 in.	130	111	150	5 ft. 10 in.	160	136	184
5 ft. 4 in.	135	115	155	5 ft. 11 in.	165	138	190
5 ft. 5 in.	140	119	161	6 ft.	170	141	196
5 ft. 6 in.	143	121	165				

SEVEN WONDERS OF THE WORLD.

The Seven Wonders of The Ancient World	The Seven Wonders of the Middle Ages	The Seven New Wonders of the World
Pyramids of Egypt	Coliseum of Rome	Wireless
Pharos of Egypt	Catacombs of Alexandria	Telephone
Hanging Gardens of Babylon	Great Wall of China	Aeroplane
Temple of Diana at Ephesus	Stonehenge	Radium
Statue of Jupiter by Phidias	Leaning Tower of Pisa	Antiseptics and Antitoxins
Mausoleum of Artemisia	Porcelain Tower of Nankin	Spectrum Analysis
Colossus of Rhodes	Mosque of St. Sophia in Constantinople	X-Rays

LENGTH OF TIME DIFFERENT FOODS REMAIN IN THE STOMACH.

	H. M.		H. M.
Apples, sweet	Raw1 30	Game [most kinds]..	Roasted4 15
Asparagus	Boiled1 30	Liver [Calves]	Frd. or Ste'd.2 30
Beans	Boiled2 30	Lamb	Grilled2 30
Beef, lean	Roasted3 00	Milk	Raw3 15
Beef, fresh salted....	Boiled2 45	Milk	Boiled2 00
Beef, old salted.....	Boiled6 00	Mutton	Bld or Brld.3 00
Beets	Boiled3 45	Nuts	5 00
Bread, fresh	Baked3 30	Oysters	Raw2 55
Cabbage	Pickled4 30	Oysters	Stewed3 30
Celery	Boiled1 30	Onions	Stewed3 30
Chicken	Boiled2 00	Pork, fat	Roasted5 15
Chicken	Roasted4 00	Pork, salt	Boiled3 15
Cheese, old	3 30	Potatoes	Frd. or Baked.2 30
Duck	Roasted2 00	Rice	Boiled1 00
Eggs, fresh	Raw2 00	Sausage	Grilled3 30
Eggs, fresh	Soft bld.3 00	Tripe	Boiled1 00
Eggs, fresh	Hard bld.4 00	Trout	Boiled1 30
Fish, not fat.....	Boiled1 30	Turkey	Roasted2 30
Fish, not fat.....	Fried3 00	Veal	R'sted or grld..5 00

DEMAND COW BRAND SODA IN PACKAGES

FORESTRY AND LAND.

Most of the dryland of the earth was at one time covered with forest, but man has considerably reduced the forest area. He burnt out the trees to provide space for pasture for the domestic animals, and chopped them down to make clearings in which to raise corn. Enormous districts have been cleared for the timber, which has yielded great profit, in this country, especially.

Now the indirect utility of forests is very great, because of their effect upon climate and soil. A piece of land bare of vegetation is exposed to the full effects of the sun and wind throughout the entire year, and to the climatic conditions caused by these agencies. But, on the other hand, if the land is covered with a growth of plants, especially trees, it enjoys advantages which the other does not. The leaves of the trees stop the rays of the sun, check violent winds, and prevent so much loss at night of the earth's warmth, which has been stored up during the daytime. The fallen leaves, together with the smaller plants which grow in the forest, prevent sudden changes in temperature. The roots penetrate the soil and bind it together; they also hold the moisture in the soil. Important results follow from all these things. The forests make the climate more even; they increase the relative humidity of the air, and prevent evaporation; they regulate the water supply, cause more evenly fed springs, reduce violent floods and the droughts which follow by making the flow of rivers more even. Thus they prevent the destruction of plants and animals by floods, they prevent the slow wearing away by water of the top soil, which is the fertile part; they prevent also landslips and avalanches. Everyone knows that you can stop a bank from washing away by growing grass on it; in exactly the same way trees prevent landslides on the hill sides, as well as the gradual erosion of the soil. Forests by checking cold or dry winds protect adjoining fields; they afford shelter to cattle and to useful birds. Forests often make a place more healthful, besides more beautiful.

In our country the increase in the alternate floods and droughts caused by the destruction of the forests led the Federal government to take steps for the protection of the remaining forests. The Act of 1891 authorized the President to set aside any part of the public lands, wholly or in part covered with timber, as public reservations. Some eighteen million acres soon were reserved, and in 1897 President Cleveland established more than twenty-one million acres more. There now are in all 185,321,302 acres. The Act of 1897 authorized the Secretary of the Interior to manage these reservations so as to secure the preservation of the forests as well as favorable conditions of water flow. In 1901 the Bureau of Forestry was established, which instructs private owners how to care for their forests, and manages the forestry service, which actually cares for the government forests. This governmental action has done much to prevent the marked change in our climate which would have followed the complete destruction of our forests.

AN INSTRUCTIVE GAME.

Every one thinks he knows the capitals of all the states in the union, but see how many of these you can guess. Each sentence represents a capital. For convenience of reference a list of all the state capitals is given.

1. A bashful girl. 2. A biblical character. 3. A famous explorer. 4. Something small but hard. 5. A bird of fable. 6. Give four capitals named after great Americans. 7. A girl's name. 8. A German diplomat.

Albany, N. Y.	Des Moines, Iowa.	Nashville, Tenn.
Annapolis, Md.	Dover, Del.	Olympia, Wash.
Atlanta, Ga.	Frankfort, Ky.	Phoenix, Ariz.
Augusta, Me.	Guthrie, Okla.	Pierre, S. Dak.
Austin, Tex.	Harrisburg, Pa.	Providence, R. I.
Baton Rouge, La.	Hartford, Conn.	Raleigh, N. C.
Bismarck, N. Dak.	Helena, Mon.	Richmond, Va.
Boise, Idaho.	Indianapolis, Ind.	Sacramento, Cal.
Boston, Mass.	Jackson, Miss.	St. Paul, Minn.
Carson City, Nev.	Jefferson City, Mo.	Salem, Ore.
Charleston, W. Va.	Lansing, Mich.	Salt Lake City, Utah.
Cheyenne, Wyo.	Lincoln, Neb.	Santa Fe, N. M.
Columbia, S. C.	Little Rock, Ark.	Springfield, Ill.
Columbus, Ohio.	Madison, Wis.	Tallahassee, Fla.
Concord, N. H.	Montgomery, Ala.	Topeka, Kan.
Denver, Colo.	Montpelier, Vt.	Trenton, N. J.

THE ANSWERS TO THE RIDDLES:

- | | |
|-----------------|---|
| 1. Cheyenne. | 5. Phoenix. |
| 2. St. Paul. | 6. Jackson, Madison, Lincoln, Jefferson City. |
| 3. Columbus. | 7. Augusta. |
| 4. Little Rock. | 8. Bismarck. |

DEMAND COW BRAND SODA IN PACKAGES

HEALTH FOR THE BABY.

CAREFUL MOTHERS SHOULD READ the following by the greatest authority on the subject, L. Emmett Holt, M. D., LL. D.

IF YOU WOULD HAVE THE BABY THRIVE AND BE HEALTHY,

nothing can be of more importance than seeing that the Baby's Nursing Bottle be kept scrupulously clean and sweet, and we, therefore, quote Dr. Holt, of New York, on the subject:

"HOW SHOULD BOTTLES BE CARED FOR?"

"As soon as they are emptied they should be rinsed with cold water and allowed to stand filled with water, to which a little **BICARBONATE OF SODA** has been added. Before the milk is put into them they should be thoroughly washed with a bottle brush and hot soap-suds and then placed for twenty minutes in boiling water.

WE WOULD SUGGEST

one-quarter to one-half teaspoonful of **COW BRAND BICARBONATE OF SODA** as the amount to be added to the water for each bottle.

SIMPLE REMEDIES FOR COMMON AILMENTS.

Headache caused by sour stomach is relieved by taking one-quarter teaspoonful of **COW BRAND BICARBONATE OF SODA** in water.

Hiccough is quickly stopped by a small teaspoonful of **COW BRAND BICARBONATE OF SODA** drunk in a glass of water.

Bites and Stings of Mosquitoes and Other Insects are relieved by frequent bathing with a solution made of a heaping teaspoonful of **COW BRAND BICARBONATE OF SODA** to a glass of water.

The eruptions caused by Ivy Poisoning is reduced and the itching quieted by frequent bathing with a solution of **COW BRAND BICARBONATE OF SODA** and water as hot as can be borne. Use three heaping teaspoonfuls to a pint of water.

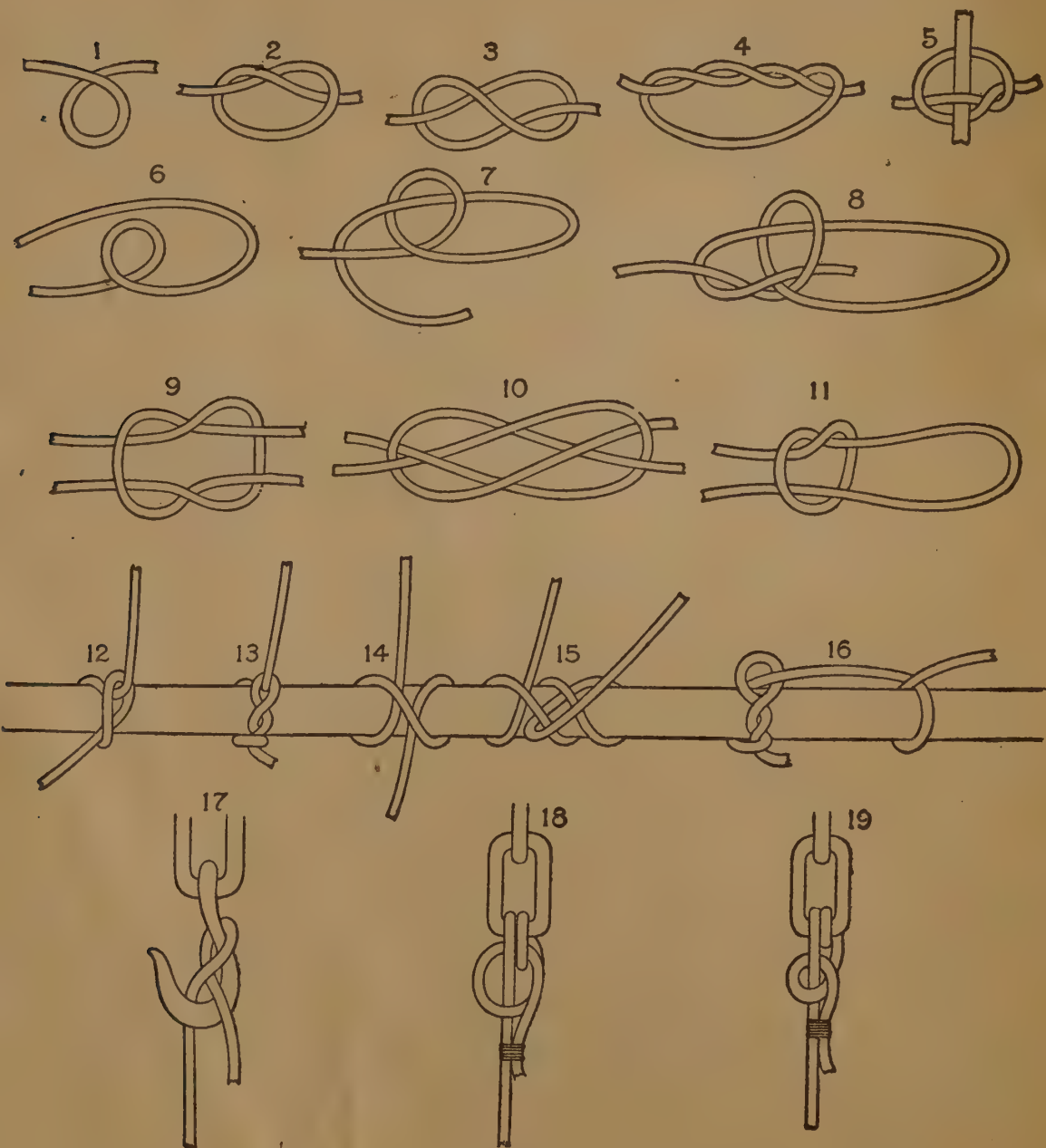
Hives and Nettle Rash indicate an acid condition of the blood which **COW BRAND BICARBONATE OF SODA** gently neutralizes.

When the irritation develops, take one-quarter to one-half teaspoonful of **COW BRAND BICARBONATE OF SODA** in a little water and repeat every few hours.

DEMAND COW BRAND SODA IN PACKAGES

SAILORS, HITCHES AND SPLICES.

- | | |
|-------------------------------|---------------------------------|
| 1—Bight of a rope. | 10—Crick Bend Knot. |
| 2—Simple or Overhand Knot. | 11—Slip Knot. |
| 3—Figure 8 Knot. | 12—Half-Hitch. |
| 4—Double Knot. | 13—Timber-Hitch |
| 5—Boat Knot. | 14—Glove-Hitch. |
| 6—Bowline, first step. | 15—Rolling-Hitch. |
| 7—Bowline, second step. | 16—Timber-Hitch and Half-Hitch. |
| 8—Bowline, completed. | 17—Blackwall-Hitch. |
| 9—Square or Beef Knot. | 18—Fisherman's Band. |
| 19—Round Turn and Half-Hitch. | |



DEMAND COW BRAND SODA IN PACKAGES

THE STATES AND THE UNION.

THE THIRTEEN ORIGINAL STATES.

STATES	RATIFIED THE CONST.	STATES	RATIFIED THE CONST.
1. Delaware	1787, December 7.	8. South Carolina	1788, May 23.
2. Pennsylvania	1787, December 12.	9. New Hampshire	1788, June 21.
3. New Jersey	1787, December 18.	10. Virginia	1788, June 26.
4. Georgia	1788, January 2.	11. New York	1788, July 26.
5. Connecticut	1788, January 9.	12. North Carolina	1789, November 21.
6. Massachusetts	1788, February 6.	13. Rhode Island	1790, May 29.
7. Maryland	1788, April 28.		

STATES ADMITTED TO THE UNION.

STATES	ADMITTED	STATES	ADMITTED
1. Vermont	1791, March 4.	19. Minnesota	1858, May 11.
2. Kentucky	1792, June 1.	20. Oregon	1859, February 14.
3. Tennessee	1796, June 1.	21. Kansas	1861, January 29.
4. Ohio	1803, February 19.	22. West Virginia	1863, June 19.
5. Louisiana	1812, April 30.	23. Nevada	1864, October 31.
6. Indiana	1816, December 11.	24. Nebraska	1867, March 1.
7. Mississippi	1817, December 10.	25. Colorado	1876, August 1.
8. Illinois	1818, December 3.	26. North Dakota	1889, November 2.
9. Alabama	1819, December 14.	27. South Dakota	1889, November 2.
10. Maine	1820, March 15.	28. Montana	1889, November 8.
11. Missouri	1821, August 10.	29. Washington	1889, November 11.
12. Arkansas	1836, June 15.	30. Idaho	1890, July 3.
13. Michigan	1837, January 26.	31. Wyoming	1890, July 11.
14. Florida	1845, March 3.	32. Utah	1896, January 4.
15. Texas	1845, December 29.	33. Oklahoma	1907, November 16.
16. Iowa	1846, December 28.	34. New Mexico	1912, January 6.
17. Wisconsin	1848, May 29.	35. Arizona	1912, February 14.
18. California	1850, September 9.		

THE TERRITORIES.

TERRITORIES	ORGANIZED	TERRITORIES	ORGANIZED
Dist. of Columbia	July 16, 1790	Alaska	July 27, 1868.
	March 3, '91.	Hawaii	April 30, 1900.

*Date when admission took effect is given from U. S. Census reports. In many instances the act of admission by Congress was passed on a previous date.

New Possessions.—A government for Porto Rico was established by the Fifty-sixth Congress. The Philippines are under a provisional civil government, Guam, Tutuila, and the Isthmian Canal Zone under Governors, all appointed by the President. Porto Rico is represented in the Congress of the United States by a Commissioner, and the Philippines by two Commissioners elected respectively by the people thereof.

THE CAPITOL AT WASHINGTON.

The Capitol is situated in latitude 38° 53' 20".4 north and longitude 77° 00' 35".7 west from Greenwich. It fronts east, and stands on a plateau eighty-eight feet above the level of the Potomac.

The entire length of the building from north to south is seven hundred and fifty-one feet four inches, and its greatest dimension from east to west three hundred and fifty feet. The area covered by the building is 153,112 square feet.

The dome of the original central building was constructed of wood, covered with copper. This was replaced in 1856 by the present structure of cast iron. It was completed in 1865. The entire weight of iron used is 8,909,200 pounds.

The dome is crowned by a bronze statue of Freedom, which is nineteen feet six inches high and weighs 14,985 pounds. It was modelled by Crawford. The height of the dome above the base line of the east front is two hundred and eighty-seven feet five inches. The height from the top of the balustrade of the building is two hundred and seventeen feet eleven inches. The greatest diameter at the base is one hundred and thirty-five feet five inches.

The rotunda is ninety-seven feet six inches in diameter, and its height from the floor to the top of the canopy is one hundred and eighty feet three inches.

The Senate Chamber is one hundred and thirteen feet three inches in length, by eighty feet three inches in width, and thirty-six feet in height. The galleries will accommodate one thousand persons.

The Representatives' Hall is one hundred and thirty-nine feet in length, by ninety-three feet in width, and thirty-six feet in height.

The southeast corner-stone of the original building was laid September 18, 1793, by President Washington with Masonic ceremonies. The corner-stone of the extension was laid July 4, 1851, by President Fillmore.

The room now occupied by the Supreme Court was, until 1859, occupied as the Senate Chamber. Previous to that time the court occupied the room immediately beneath, now used as a law library.

DEMAND COW BRAND SODA IN PACKAGES

DOMESTIC WEIGHTS AND MEASURES.

Apothecaries' Weight: 20 grains=1 scruple; 3 scruples=1 dram; 8 drams=1 ounce; 12 ounces=1 pound.

Avoirdupois Weight (short ton): 2711—32 grains=1 dram; 16 drams=1 ounce; 16 ounces=1 pound; 25 pounds=1 quarter; 4 quarters=1 cwt.; 20 cwt.=1 ton.

Avoirdupois Weight (long ton): 2711—32 grains=1 dram; 16 drams=1 ounce; 16 ounces=1 pound; 112 pounds=1 cwt.; 20 cwt.=1 ton.

Troy Weight: 24 grains=1 pennyweight; 20 pennyweights=1 ounce; 12 ounces=1 pound.

Circular Measure: 60 seconds=1 minute; 60 minutes=1 degree; 30 degrees=1 sign; 12 signs=1 circle or circumference.

Cubic Measure: 1,728 cubic inches=1 cubic foot; 27 cubic feet=1 cubic yard.

Dry Measure: 2 pints=1 quart; 8 quarts=1 peck; 4 pecks=1 bushel.

Liquid Measure: 4 gills=1 pint; 2 pints=1 quart; 4 quarts=1 gallon; 31½ gallons=1 barrel; 2 barrels=1 hogshead.

Long Measure: 12 inches=1 foot; 3 feet=1 yard; 5½ yards=1 rod or pole; 40 rods=1 furlong; 8 furlongs=1 statute mile (1,760 yards or 5,280 feet); 3 miles=1 league.

Mariners' Measure: 6 feet=1 fathom; 120 fathoms=1 cable length; 7½ cable lengths=1 mile; 5,280 feet=1 statute mile; 6,085 feet=1 nautical mile.

Paper Measure: 24 sheets=1 quire; 20 quires=1 ream (480 sheets); 2 reams=1 bundle; 5 bundles=1 bale.

Square Measure: 144 square inches=1 square foot; 9 square feet=1 square yard; 30¼ square yards=1 square rod or perch; 40 square rods=1 rood; 4 roods=1 acre; 640 acres=1 square mile; 36 square miles (6 miles square)=1 township.

Time Measure: 60 seconds=1 minute; 60 minutes=1 hour; 24 hours=1 day; 7 days=1 week; 365 days=1 year; 366 days=1 leap year.

STATE NICKNAMES AND STATE FLOWERS.

Alabama—Cotton State, goldenrod; Arizona—....., sequoia cactus; Arkansas—Bear State, apple blossom; California—Golden State, poppy; Colorado—Centennial State, columbine; Delaware—Blue Hen State, peach blossom; Florida—Peninsula State; Georgia—Cracker State, Cherokee rose; Idaho—....., syringa; *Illinois—Sucker State, violet; †Indiana—Hoosier State, carnation; Iowa—Hawkeye State, wild rose; Kansas—Sunflower State, sunflower; Kentucky—Blue Grass State, blue grass; Louisiana—Pelican State, magnolia; Maine—Pine Tree State, pine cone; Maryland—Old Line State; Massachusetts—Bay State; Michigan—Wolverine State, apple blossom; Minnesota—Gopher State, mocassin; Mississippi—Bayou State, magnolia; Montana—Stub Toe State, bitter root; Missouri—....., goldenrod; Nebraska—....., goldenrod; Nevada—Silver State; New Hampshire—Granite State; New Jersey—Jersey Blue State, sugar maple (tree); New York—Empire State, rose; North Carolina—Old North State; North Dakota—Flickertail State, goldenrod; Ohio—Buckeye State; Oklahoma—....., mistletoe; Oregon—Beaver State, Oregon grape; Pennsylvania—Keystone State; Rhode Island—Little Rhody, violet; South Carolina—Palmetto State; South Dakota—Sunshine State, pasqueflower (*Anemone patens*), with motto, "I Lead"; Tennessee—Big Bend State; Texas—Lone Star State, bluebonnet; Utah—....., sego lily; Vermont—Green Mountain State, red clover; Virginia—The Old Dominion; Washington—Evergreen State, rhododendron; W. Virginia—The Panhandle; Wisconsin—Badger State.

Only nicknames that are well known and "state flowers" officially adopted or commonly accepted are given in the foregoing list.

*Native State tree, the native oak. †Official State song, "On the Banks of the Wabash".

WEDDING ANNIVERSARIES.

First—Cotton.	Eighth—India Rubber.	Fifteenth—Crystal
Second—Paper.	Ninth—Willow.	Twentieth—China.
Third—Leather.	Tenth—Tin.	Twenty-fifth—Silver.
Fourth—Fruit and Flowers.	Eleventh—Steel.	Thirtieth—Pearl.
Fifth—Wooden.	Twelfth—Silk and Fine Linen.	Fortieth—Ruby.
Sixth—Sugar.	Thirteenth—Lace.	Fiftieth—Golden.
Seventh—Woolen.	Fourteenth—Ivory.	Seventy-fifth—Diamond.

DEMAND COW BRAND SODA IN PACKAGES

COW BRAND SODA

SHOULD BE IN

- (1) YOUR KITCHEN (3) YOUR NURSERY**
(2) YOUR LAUNDRY (4) YOUR BARN AND DAIRY

(1) IN THE KITCHEN BECAUSE :

IT'S UNQUESTIONABLY THE PUREST AND MOST ECONOMICAL
LEAVENING AGENT MAKING DELICIOUS BISCUIT, CRULLERS
AND COOKIES AND THE MOST DELICATE CAKE.

IT PRESERVES MEAT FROM TAINT AND MAKES IT TENDER.

IT SWEETENS TURNED MILK.

IT RENDERS BOTH DRIED AND GREEN VEGETABLES MORE
DIGESTIBLE IF USED IN THE COOKING WATER.

(2) IN THE LAUNDRY BECAUSE :

IT SOFTENS HARD WATER,

LOOSENS DIRT AND WHITENS FABRICS.

(3) IN THE NURSERY BECAUSE :

IT CHANGES IRRITATING HARD WATER TO A SOOTHING BATH

IT CLEANSSES BABY'S BOTTLES PERFECTLY.

(4) IN THE BARN AND DAIRY BECAUSE :

IT PREVENTS HOG AND CHICKEN CHOLERA IF GIVEN WEEKLY
IN THE FEED.

IT KEEPS MILK CANS SWEET AND CLEAN.

IT INCREASES THE YIELD OF MILK IN COWS IF A TEASPOON-
FUL IS GIVEN DAILY IN THE FEED FOR TEN DAYS.

IT CURES COLIC IN HORSES AND CATTLE IF A HALF POUND
IS DISSOLVED IN WARM WATER AND ADMINISTERED IN A
LONG NECKED BOTTLE WHICH IS EMPTIED DOWN THE AN-
IMAL'S THROAT.

IT MAKES SCRATCHES HEAL RAPIDLY WHEN USED AS A
LOTION.

IT ABSOLUTELY PREVENTS DAMAGE FROM WEEVIL IF SCAT-
TERED GENEROUSLY OVER EACH SIX INCH LAYER OF
CRIBBED CORN IN THE SHUCK.

DON'T YOU NEED IT?

